American Cheese Society Cheese and Dairy Product Lexicon and Glossary Version 2



American Cheese Society Cheese and Dairy Product Lexicon and Glossary THE ACS LEXICON & GLOSSARY

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Version 1 was published February 1, 2018. This document was compiled and edited by Dr. Stephanie Clark, Craig Gile, Vince Razionale, Bill Rufenacht, and Sarah Spira, Terms and definitions were modified from the Technical and Aesthetic score sheets and glossaries created by the ACS Judging & Competition Committee over the course of the history of the competition, as well as references cited in the Bibliography. Version 2 was published in May 2025 and was compiled and edited by Bill Rufenacht and Bill Stephenson.

INTRODUCTION

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The **ACS Cheese and Dairy Product Lexicon and Glossary** aims to facilitate conversations across the supply chain of cheese by creating a credible, modern resource that provides a greater understanding of the myriad ways in which cheese is discussed and described.

A "working group" of ACS staff and experts in dairy food science, cheesemaking, and cheesemongering were involved in compiling what will hereafter be referred to as the ACS Lexicon & Glossary. The objective was to codify the terminology used when talking about sensory characteristics and evaluating and selling cheese and fermented dairy products.

The ACS Lexicon & Glossary is a living document. The working group started with a focused selection of vetted technical terminology and will expand this work in the coming years to include a unique flavor and aroma wheel in addition to the terms included in the ACS Lexicon & Glossary. Terms will be added if/when they meet the following criteria:

- The taste, flavor, aroma, texture, or appearance can be expressed in scientific terms, or a consensus has been reached for the use of the term and its descriptor.
- The cause of the defect or attribute can be scientifically explained.

Assessing, grading, judging, evaluating, marketing, and socializing with cheese, and the varying contexts in which these activities happen, require different types of terminology. It is ACS's hope that, through the development of the ACS Lexicon & Glossary, cheese industry members can communicate more readily and clearly about cheese and dairy products, in order to encourage the production, sale, and consumption of increasingly high-quality artisan and specialty cheeses. It is important to note that words such as "good" or "bad" do not appear in the ACS Lexicon & Glossary, as such terms are subjective. While a cheese may receive a low score in a contest, it may sell very well in the market, because it meets consumer desires or otherwise fits a niche in the marketplace. The reverse can also occur – winning awards does not guarantee market success.

How to Use this Glossary:

Terms in the ACS Lexicon & Glossary are listed in alphabetical order for ease of use. ACS has adopted the following structure to provide additional information about the terms. Please note that the elements within this structure will be applied to the terms as they are relevant.

- **Definition**: Definition of the term.
- Reference point: Most frequent/common associations with the term.
- Styles where it occurs: Styles of cheese or dairy products where this attribute is most common.
- **Attribute/Defect:** Whether the characteristic is generally considered an attribute or a defect, and why. If a characteristic is only considered a defect, only the word **Defect** will appear.
- **Possible causes**: Identification of possible technical cause(s) for the defect.
- Synonyms: Words that can be used interchangeably with the term.
- **Related terms:** Words related to the term; these help to provide a deeper understanding of the term. Synonyms and related terms that are defined in this glossary are formatted in ALL CAPS.

Talking About the Sensory Characteristics of a Cheese or Dairy Product:

During an evaluation of a cheese or dairy product, the following areas are assessed:

- **Rind/Surface:** The exterior layer of a cheese. When a cheese is evaluated, the condition, appearance, flavor, and aroma of the rind are assessed. Evaluators and judges might comment on the thickness/thinness, roughness/smoothness, evenness of the rind, and aroma/flavor, including how the flavor of the rind works with the flavor of the paste and the rest of the cheese.
- **Body/Paste/Interior of the cheese:** The internal character of the cheese. Some styles may not have an obvious change from surface to interior, while others can be dramatically different from surface to core. Evaluators and judges will either remove a plug (using a metal trier) or cut into

the cheese, depending on the cheese format. Evaluators and judges will often break the cheese plug to observe several characteristics, then "work," or manipulate, a smaller portion of the plug of cheese between the thumb and two forefingers to partially evaluate the product prior to tasting.

Sensory characteristics evaluated in cheese and dairy products are grouped into the following categories:

- Body/Texture
- Flavor/Aroma
- Appearance/Color/Rind Development

In the ACS Lexicon & Glossary, the following definitions are used when talking about the sensory characteristics of a cheese or dairy product:

- **Attribute**: A characteristic of the product's sensory profile, determined by organoleptic evaluation. An attribute is typically considered a positive term, or an asset, depending on context and intensity.
- **Defect**: A characteristic that detracts from the product's sensory profile. A characteristic that is an attribute in one product may be a defect in another, if it does not belong in that cheese's sensory profile at all (e.g., rancidity in colby cheese). Additionally, a characteristic that is typically considered an attribute can be a defect if it:
 - o does not belong in that cheese's sensory profile at that age (e.g., sulfur in mild cheddar);
 - o is lower than expected in that cheese's sensory profile (e.g., low salt in feta); or
 - o is excessive in that cheese's sensory profile (e.g., extreme tyrosine crystals in cheddar).

Baseline Definitions:

Basic Tastes: BITTER, SALTY, SOUR (ACID), SWEET, UMAMI

Basic tastes are experienced on the tongue and palate and, in and of themselves, do not produce aromatic compounds. When assessing and evaluating basic tastes, one observes and identifies how they are experienced, in the context of a given dairy product. The impression can take on either positive or negative connotations, depending on the context and style of cheese. Differences in perception (e.g. variances in sensitivity for bitter and heat perception) and preference (e.g. variances in preferences for sweetness and astringency) play a role in overall acceptability of a product. Even where in the mouth or how a characteristic is perceived may vary greatly. The ACS Lexicon & Glossary aims to use language that has been generally applicable across decades of describing and judging dairy products. The language will continue to evolve, and this document will be modified accordingly.

The ACS Judging & Competition:

Standards of identity exist for a number of dairy products and ingredients. The United States Standards of Identity can be accessed online through the FDA Code of Federal Regulations (<u>Cheeses</u> and <u>Milk and</u> <u>Cream Products</u>). The American Cheese Society's definitions of cheeses can be found on the <u>ACS</u> <u>website</u>, along with information about the ways in which cheeses and dairy products can be categorized. Cheesemakers submit cheese to the ACS Judging & Competition based on the categories defined by the ACS Judging & Competition Committee. The terms, or characteristics, that are listed on ACS Judging & Competition score sheets reflect attributes that are typical or characteristic of that particular <u>category</u>. Definitions for those terms appear in this ACS Lexicon & Glossary.

A product's score sheet in the ACS Judging & Competition is meant to communicate the culmination of each judge's overall experience with the product. Boxes are checked to indicate the presence or absence of attributes in a product, and judge comments are included on score sheets. In the case of technical judges, the score is based upon half- to full-point deductions from "ideal" for the given style. In the case of aesthetic judges, full points are added for quality traits and characteristics that make the product unique.

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When evaluating products entered into the ACS Judging & Competition, Aesthetic and Technical judges likely use on of the following scales when considering each characteristic:

- None; much too little; a little too little; just about right; a little too much; much too much; excessive
- Very low; average; very high
- None; slight; definite; pronounced

These words, however, do not explicitly appear on the ACS score sheets, nor do they appear in this glossary. The ACS Lexicon & Glossary includes the preferred terminology and offers suggestions regarding how to measure and communicate the experiential variables: presence, absence, intensity, and experience of the characteristics herein defined.

Origin of Flavor in Cheese

What animals eat and variability in ingredients, temperature, and humidity play a role in dairy product quality. The way one experiences flavor in cheese is related to the development of volatile and non-volatile compounds. Lipolysis, glycolysis, and proteolysis are the main chemical processes that cause the components of cheese to break down into peptides, esters, acids, ketones, fatty acids, etc. This biochemical cascade is different for every style of cheese, but it is what comprises the unique sensory characteristics of the cheese being evaluated. For more information on the chemistry of cheese, and how it relates to flavor, see the <u>Cheese Science Toolkit</u>.

Origin of Cheese Defects:

Defects in cheese and other dairy products can result from many variables that relate to the loss of control (temperature, pH, humidity, bacteria, etc.) between the field and processing plant, within the processing facility, along the distribution chain, at the retail store/restaurant, and with the consumer. Excess lipolytic activity, late gas blowing, microbial contamination, and other chemical reactions lead to appearance, taste, flavor, aroma, body, and texture defects. The aim of the ACS Lexicon & Glossary is not to give exhaustive explanations, but rather to provide context with generally understood possible causes for the defects identified and described. Readers are encouraged to review the books and articles listed in the bibliography to gain a deeper understanding of dairy chemistry and microbiology, which drive many quality characteristics of dairy foods. Links to the books and articles can be found in the ACS Library.

Sales, Marketing, and Monger Talk: Adjectives and Synonyms

Technical terms often do not have the same poetic, romantic, descriptive, and associative weight as some of the synonyms commonly used in the marketing and promotion of cheese and dairy products. Without passing judgement on the use of those terms, ACS recognizes that sometimes industry members all need to speak the same language in order to continue to work with producers to develop, market, and sell great cheese. The language of description, of selling cheese, is an equally important tool to communicate with consumers, in order to expand the audience for artisan and specialty cheese and dairy products. The ACS Lexicon & Glossary will hopefully help to connect the dots through all points of the supply chain and elevate the cheese experience for all involved.

THE ACS LEXICON & GLOSSARY

APPEARANCE:

APPEARANCE

Definition: An attribute that encompasses the variety of terms used to describe the visual appearance of cheese body and rind development characteristics. It is one of the main families of attributes that is

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evaluated when a cheese is assessed, and is often accompanied by a qualifying adjective. If the cheese is wrapped with a cloth or other wrapper, a variety of descriptions may be used by judges for describing the wrapping of cheese (e.g., wrinkled, torn, dirty, too long or short at one end, loose from cheese). **Reference point**: Color of the paste, the condition of the rind, and cloth covering, if present. Appearance can be described in a positive or negative manner.

AIR HOLES (STEAM HOLES)

Definition: Holes in mozzarella or other pasta filata caused by steam retained in the paste during the cooking and stretching process. This defect is also common in processed cheese. **Styles where it occurs:** Stretched curd cheeses, pasta filata styles, mozzarella, provolone. **Attribute/Defect:** A common defect in pasta filata styles, and processed cheese.

BELLIED

Definition: Cheese which exhibits rounded surfaces which should be flat, due to excess or unwanted gas production, or cheese that has not been turned frequently enough. **Styles where it occurs:** Can occur in any cheese. **Attribute/Defect:** Always considered a defect. **Related terms:** HUFFED, BLOWN, blowing.

BLEACHED SURFACE

Definition: Cheese appears faded at the surface and the fading progresses inward to some extent.
Styles where it occurs: Brined cheeses that have a surface that was exposed to air during brining, or cheese exposed to UV light that was packaged in material lacking a UV barrier.
Attribute/Defect: Defect.
Related terms: Light oxidation.

BLEACHED/BLEACHING

Definition: A defect found in flavored yogurt, visualized by streaking of white yogurt throughout the colored yogurt body.

Reference point:



Styles where it occurs: Yogurt Defect: Streaking color is unappealing to consumers. Possible cause: Decolorization may result from localized oxidation/reduction reactions in yogurt. Related terms: COLOR, COLOR LEACHING, FADED, Streaking

BURST BANDAGE

Definition: A cut, tear, or snag in the cheese cloth wrap of a bandaged cheddar, normally appearing near the seam of the cloth.
Styles where it occurs: Bandaged styles, typically cheddars.
Attribute/Defect: Defect
Related terms: Torn Bandage.

CALCIUM LACTATE

Definition: Calcium lactate crystals (CLC) can appear as pinpoints or as a diffuse white haze on Cheddar-type cheeses. They can also be found on the interior in some cases (less common). Calcium

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lactate crystals are often confused with TYROSINE crystals. Tyrosine crystals are not the same thing and will not be found in young cheese.

Reference Point:



Styles where it occurs: Cheddars and Cheddar-types

Defect: Consumers sometimes mistake calcium lactate crystals for mold, which results in lost sales. **Possible causes:** Calcium level is beyond saturation point, and precipitates out due to rapid, or excess acid production, free whey in package, or elevated storage temps. CLC may be found on young cheeses that have loose packaging and/or have undergone temperature fluctuations. **Related term:** CRYSTALS

CHECKED RIND

Definition: Numerous small cracks or breaks evident in the rind – sometimes following the outline of curd particles.

Reference Point:



Styles where it occurs: Most common in natural rind varieties. Attribute/Defect: Defect. Related terms: Split rind, CRACKED RIND, curd openings.

CLOSED

Definition: Closed, as opposed to BLIND, is the term used to describe the ideal body of cheeses that are expected to have no gas formation or openings. Cheese is well knit, with no mechanical or gas openings. **Styles where it occurs:** Typically used in evaluating hard cheeses. **Related terms:** BLIND, EYES, OPEN

COLOR

Definition: Color is used by judges to describe a visual aspect of a cheese's exterior/rind and interior appearance. It is desirable to have a cheese that exhibits bright, clear coloration that is uniform, and not mottled, seamy, or uneven.

Styles where it occurs: All fermented dairy products

Attribute/Defect: Many products are judged by their color, and color expectations are associated with specific products. Defective colors can result from spoilage bacteria, exposure of the annatto to oxygen, and/or exposure of the cheese to oxygen and/or light.

Possible causes: Color in cheese comes from the type of dairy animal, their diet, or added ingredients like the colorant annatto.

Related terms: ATYPICAL, BLEACHED, Bright, DULL, FADED, PINKING, MOTTLED, OXIDIZED, SEAMY

COLOR LEACHING

Definition: Pigment trails or leaching of color from fruit into yogurt, herbs or peppers into cheese, etc. **Reference Point**:



Styles where it occurs: Flavored dairy products

Defect: Color leaching is relatively common, particularly in light yogurts. It is not as objectionable to consumers as some other defects.

Possible cause: Low pH; poor stabilization or incomplete blending of yogurt base with fruit material. **Related terms:** BLEACHED, MOTTLED

COLORED SPOTS

Definition: Brown or black spots (typically in Swiss type cheeses) usually resulting from pigment producing *Lactobacillus* or *Bacillus* species. In cheeses colored with annatto it can also result from the clumping of solids if color is not agitated well before diluting and adding to cheese milk. **Styles where it occurs:** Swiss or natural cheeses colored with annatto.

Attribute/Defect: Always considered a defect.

Related terms: SPOTS, SPECKS.

CRACKED RIND – SURFACE CRACKS

Definition: Openings in the exterior coating or rind which compromise the integrity of the surface allowing internal paste to dry and potentially mold.

Styles where it occurs: Possible in any cheese, most common in natural rinds.

Attribute/Defect: Considered a defect.

Possible causes: Poor workmanship, rough handling, too dry a natural rind, improper coating application, too dry curing room.

Related terms: Disturbed rind.

DEFECTIVE COATING

Definition: Any of the following conditions present in a wax, paraffin or polycoat coating:

- 1. Brittle wax that peels off in the form of flakes
- 2. Flat or raised blisters in the wax coating, or gas bubbles under the wax.
- 3. Checked paraffin, including cracks, breaks or hairline checks in the wax. coating of the cheese.

coating of the cheese.

Styles where it occurs: Waxed or poly-coated cheeses. Attribute/Defect: Defect.

FADED Definition: Uneven color. Reference point:



Styles where it occurs: Cheese colored with annatto.

Attribute/Defect: Considered a defect.

Possible causes: Light oxidation caused by exposure to UV light and packaging material lacking a UV barrier.

Related terms: Light oxidation.

FREE CREAM

Definition: The cream dressing does not cling to curds of cottage cheese when spooned onto a plate. It pulls away and separates from the curd.

Reference Point:



Styles where it occurs: Cottage cheese

Defect: Free cream is typically not noticeable immediately, so it is often overlooked by consumers. Technical judges will consider the product improperly stabilized and will consider it a defect. **Possible causes:** Improper use of stabilizers or lack of stabilization **Related term:** FREE WHEY

FREE MOISTURE/FREE WHEY

Definition: Beads of moisture or an accumulation of moisture in the voids of packaging material released from the body of cheese or in the openings of cheese.

Reference point: Free whey may remain in mechanical openings of the body of cheese during aging and can cause a flavor defect-whey taint.

Styles where it occurs: May appear in all cheese varieties.

Attribute/Defect: Considered a technical defect.

Possible causes: Poor or inadequate drainage during manufacture, poor or inadequate time,

temperature, or pressure at pressing.

Related terms: Weeping, wet, free moisture.

HIGH EDGE

Definition: A block or wheel which has cheese has raised out of the form and follower during pressing to form a ridge or rim of varying size.

Styles where it occurs: Pressed natural cheeses.

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Attribute/Defect: Defect.

HUFFED

Definition: A cheese that is swollen because of fermentation creating unwanted gas resulting in a rounded versus flat profile.
Styles where it occurs: Any natural cheese variety.
Attribute/Defect: Defect.
Related terms: GASSY, BLOWN, blowing.

IMMATURE MOLD

Definition: Terminology used to describe underdeveloped mold on the surface or within a cheese. **Reference Point**:



Styles where it occurs: Surface-ripened and mold-ripened cheeses Defect: Immature mold is typically considered a defect. Possible cause(s): Improper relative humidity or insufficient time Related terms: Unripe

IRREGULAR BANDAGE

Definition: An overlapping, loose, wrinkled or poorly fitted bandage caused when the cheesecloth is not placed properly in the cheese hoop. Too much bandage on one end, too little on another end, overlapping or wrinkled bandage. **Styles where it occurs:** Most common in bandaged cheddars. **Attribute/Defect:** Defect. **Related terms:** BURST BANDAGE, torn bandage.

LOOSE SEAL Definition: An incomplete seal on a vacuum package allowing air to penetrate the package causing a loose package. Attribute/Defect: Defect. Related terms: Leaker, Leaky seal.

LOOSE WRAP Definition: Packaging material that does not tightly adhere to the surface of a cheese. Styles where it occurs: Any. Attribute/Defect: Defect.

LOPSIDED Definition: Cheese that is not symmetrical – higher on one side than the other. Styles where it occurs: Possible in any natural cheese. Attribute/Defect: Defect.

MATTED Definition: Curds appear to be clumped or stuck together. Reference Point:



Styles where it occurs: Cottage cheese Defect: Matted is almost always considered a defect. Possible cause: Fast acid production, improper stirring of curd at any point in the make procedure Synonyms: Clumped, LUMPY

MITES

Definition: Members of the arachnid family which are attracted to natural rinds of hard cheeses. Typically, but not always, from *Tyrophagus casei*.

Reference point: Often presents as a powdery surface on natural-rinded cheeses (left image), or trails or tunnels into cheese surface (right image).



Styles where it occurs: Hard/Firm cheeses with natural rind

Defect: Mites compromise the integrity of the cheese and are therefore always considered a defect. **Possible causes:** Infrequent or improper care during aging, improper cloth application (for bandaged cheeses), OPEN texture **Synonyms:** Mite-damaged Mitey

Synonyms: Mite-damaged, Mitey

MOLD, IMMATURE see IMMATURE MOLD

MOLD ON SURFACE

Definition: Mold growth on the surface of a cheese that is not expected to have such growth, or on the exterior of the wax or polycoat.

Styles where it occurs: Any. Attribute/Defect: Defect, unless present on a natural rind. Related terms: SURFACE MOLD.

MOLD UNDER BANDAGE

Definition: Mold growth under wax and / or bandage that has penetrated the surface of the cheese. **Styles where it occurs:** Most common in bandaged cheddars. **Attribute/Defect:** Defect unless present in a cheese with a natural rind.

MOLD UNDER WRAPPER

Definition: Spots of mold have developed on the surface of the cheese under the wrapper.

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Styles where it occurs: Any natural cheese. **Attribute/Defect:** Defect, reflecting on packaging. **Related terms:** MOLDY, SURFACE MOLD, mold under packaging.

MOLDY

Definition: Dark color and off flavor in cheese plug or cut surface, musty aroma or flavor. **Reference point:**



Styles where it occurs: Can occur in almost any style of cheese, and the particular style will determine whether it should be considered a defect or an attribute. When discovered in a cheese where it is not expected (below), it is a serious defect.

Attribute/Defect: In styles where mold is typical (i.e. mold-ripened soft cheese, natural rinds, among others), mold is considered an attribute and would not be commented on unless the mold flavor/aroma is lacking or excessive. In styles where mold is not typical (i.e. fresh cheese, sealed or bandaged block cheddar, among others), the appearance/aroma/flavor of mold is undesirable and considered a clear defect.

Possible causes: If not intentional, likely causes include poor seal, cracked rind, or other contact with air. **Related terms**: EARTHY, MUSTY

MOTTLED

Definition: Uneven pattern of coloring in the cheese, most notable in colored cheese. Irregular shaped spots where portions of cheese are lighter or darker.

Styles where it occurs: Most easily observed in cheese colored with annatto such as colored cheddar or colby.

Attribute/Defect: Considered a defect in a cheese that is supposed to be one tone.

Possible cause: Non-uniform acidity development in the curd, combining curd from different vats, uneven microbial growth.

Synonym: Uneven color across the body of cheese.

Related terms: Uneven coloring, wavy, color leaching.

MUSTY See MOLDY

OPEN

Definition: Describes the visual appearance of a cheese, and has two meanings. 1) Open structure in wax or rind, 2) Contains irregularly shaped mechanical openings. **Reference point:**



Styles where it occurs: Uniform mechanical openings are expected in the body of feta but not in well-aged Cheddar.

Attribute/Defect: Openings can be visually appealing or may detract from the intended style of cheese. **Possible causes:** Possibly due to poor workmanship, from making and/or pressing process. This defect is not related to issues with gas.

Related terms: CHECKED, CLOSED, CRACKED, FROG MOUTH, Loose knit

OVERDEVELOPED RIND:

Definition: Excessive mold or bacterial surface growth on surface-ripened cheeses, or excessively dry or thick rind in natural rind cheeses.

Styles where it occurs: Surface ripened or natural rind cheeses.

Attribute/Defect: Considered a defect.

Possible causes: Improper handling in affinage, culture application issues, too long in curing room, improper time, temperature, or humidity in curing room.

Synonym: Overdeveloped mold.

Related terms: Excessive rind.

PACKAGING OVERLAP

Definition: Packaging which is unevenly applied so that the material is overlapping. **Attribute/Defect:** Packaging defect.

PINK RING

Definition: A defect in Swiss, Parmesan and other high temperature cook cheeses in which a pink ring develops around the outer edge of the cheese and in Swiss, can also surround eyes. May be caused by a heat tolerant organism *Thermus thermophilus*, which survives high temperatures. **Styles where it occurs:** Swiss, less frequently in Parmesan. **Attribute/Defect:** Always considered a defect.

PINKING

Definition: Discoloration of cheese that presents itself by turning from orange to pink. Pinking can also happen to Swiss cheeses and presents as a pinkish layer near the rind.

Reference point:



Styles where it occurs: Cheddar, other cheeses that are colored with Annatto, Swiss styles **Defect:** Pinking is unappealing to consumers and is considered a serious defect.

Possible cause: Evidence of bleaching of annatto by exposure to light – most often a defect that occurs in pre-packed cheeses for retail. In Swiss-style cheeses, this is a result of spoilage microorganisms. **Synonym:** OXIDIZED

Related terms: COLOR, FADED

PRESENTATION See APPEARANCE

RIND ODOR

Definition: An unnatural, unpleasant, or unappealing odor coming from the rind, usually due to areas that were wet and have become decayed or decomposed. **Attribute/Defect:** Defect. **Related terms:** RIND ROT.

RIND ROT

Definition: Soft spots on the cheese surface that have become discolored and have decayed or decomposed, leaving a very soft area, often with an unpleasant aroma. **Styles where it occurs:** Most often seen in natural rinds, less frequently in vacuum packaged cheese. **Attribute/Defect:** Defect. **Related terms:** RIND ODOR, WEAK RIND, WET RIND.

ROUGH SURFACE Definition: The exterior of the cheese lacks smoothness, poor quality finish. Styles where it occurs: Possible in any natural rind or vacuum-packed cheese. Attribute/Defect: Defect. Related terms: Poor finish. ROUNDED CORNERS / EDGES Definition: Rounded edges or corners of a cheese which should be sharp, crisp, or well defined. Attribute/Defect: Defect.

SEAMY

Definition: Visible white thread-like lines that outline the curds.
Styles where it occurs: Most easily visible in milled curd colored cheddar, less obvious in white cheese.
Attribute/Defect: Considered a technical defect.
Possible cause: Fat or salt at curd surface, elevated temperature at press.
Related terms: Uneven color.

SHATTERED CURD

Definition: Curds in creamed cottage cheese appear to be broken, non-uniform in shape and size. **Reference Point**:



Styles where it occurs: Cottage cheese

Attribute/Defect: Shattered curd has become so commonplace that it is not considered a serious defect unless extensive.

Possible cause: Curd breakage can occur any time after the initial cut. Shattering is almost inevitable unless extreme care is taken at every stage between cutting and cupping. **Related terms:** Non-uniform

SHRUNKEN

Definition: The defect is visualized when a container of yogurt is first opened. The yogurt pulls in from the edges of the container due to tightening of curd structure; free whey often fills the void. **Reference Point:**



Styles where it occurs: Yogurt

Defect: Shrunken is unappealing to consumers and is typically considered a technical defect. **Possible cause:** Low milk solids, excess acid development, agitation during incubation, insufficient milk pasteurization temperature or holding time, poor product formulation, inadequate stabilizer(s), temperature fluctuations.

Related terms: FREE WHEY

SLIMY

Definition: Cheese surface which is undesirable, displaying a slippery, GREASY, or a WET SURFACE. **Attribute/Defect:** Defect. **Related terms:** WET RIND.

SLIP COAT

Definition: Rind pulling back or curling away from the paste creating a gap with liquid paste pooling or spilling out of rind when cut.

Reference point:



Styles where it occurs: Mold-ripened soft cheeses **Attribute/Defect:** Considered a defect. **Possible causes:** Excessive proteolysis under the rind creating a liquid layer and an acidic core or

center.

Related terms:Slip skin.

SLITS

Definition: Short linear openings in the paste of a cheese formed by undesired gas production. **Reference point:**



Styles where it occurs: Most common in firm, semi-firm cheeses, or Swiss cheese varieties. **Attribute/Defect:** Considered a technical defect.

Possible cause: Heterofermentative bacteria, Lactobacillus or Clostridium, spore formers. In Swiss styles, slits and associated defects can be caused by too rapid gas formation, or too acidic cheese paste. **Synonym:** Late gas.

Related terms: Picks, checks, splits, cracks, fisheyes.

SOFT SPOTS

Definition: Areas on the exterior of the cheese that are soft to the touch, and normally faded and wet. **Styles where it occurs:** Most common in natural rinds. **Attribute/Defect:** Defect. **Related terms:** RIND ROT.

SOILED SURFACE

Definition: A cheese surface that contains extraneous material, rust spots, or other discolorations. **Styles where it occurs:** Any cheese variety. **Attribute/Defect:** Defect.

SOUR RIND

Definition: A fermented rind condition usually confined to the faces of the cheese. **Styles where it occurs:** Cheeses with natural rinds. **Attribute/Defect:** Defect. **Related terms:** RIND ODOR, SOFT SPOTS.

SPECKS / SPOTS (BROWN / WHITE)

Definition: Small dark brown or white spots that can be seen in Swiss cheese paste. **Styles where it occurs:** Swiss styles. **Attribute/Defect:** Defect. **Possible causes:** Pigmented Lactobacillus or Bacillus specie growth. **Related terms:** COLORED SPOTS.

SURFACE DEFECTS

Definition: A defect where there are areas of a surface ripened cheese lacking the expected or desired growth, or a rindless cheese displaying unwanted growth or visible flaws in finish. **Styles where it occurs:** Any cheese variety. **Attribute/Defect:** Defect. **Related terms:** UNDERDEVELOPED RIND, inadequate SURFACE MOLD growth, excess rind.

SURFACE MOLD

Definition: Mold occurring on the paraffin or exterior surface of the cheese. **Styles where it occurs:** Any cheese except for surface ripened varieties which are expected to have mold growth. **Attribute/Defect:** Defect. **Related terms:** MOLD UNDER WRAPPER, MOLD UNDER BANDAGE.

SURFACE ODOR

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Definition: An unpleasant odor from decay or decomposition of an area on the surface of a cheese. **Attribute/Defect:** Defect. **Related terms:** RIND ODOR, RIND ROT.

SYNERESIS see FREE WHEY

TYROSINE CRYSTALS

Definition: Round and crunchy crystals on the surface of and within the body of aged cheese are evidence of proteolysis (i.e., the free amino acid tyrosine) crystallization.

Reference point: Cougar Gold cheese (Washington State University) aged 18 months or more. Crystals may be seen on the surface but may be calcium lactate crystals; (left image. Crystals within the

body of the cheese (right image) are almost always tyrosine crystals.



Styles where it occurs: Aged hard cheeses, including Italian, Gouda, Alpine, Cheddar styles **Attribute/Defect:** May be considered a defect if extensive, though aesthetic judges may consider them a positive attribute.

Possible cause: Proteolysis of proteins into peptides, then into the amino acid tyrosine with extensive aging (typically > 1 year).

Related terms: CALCIUM LACTATE is often confused for tyrosine crystals, but tyrosine is only present in aged cheeses.

UNDERDEVELOPED RIND

Definition: Sparse growth on the surface of a mold ripened cheese or extremely thin rind of a natural rind cheese.

Styles where it occurs: Surface ripened cheeses or natural rind cheeses.

Attribute/Defect: Considered a defect.

Possible causes: Improper temperature and/or humidity in curing room, inadequate time in curing room for mold to develop, culture application or affinage issues.

Synonym: Underdeveloped mold.

Related terms: Immature mold, inadequate mold.

UNEXPECTED SURFACE GROWTH

Definition: Undesired microbial growth on cheese surface.

Styles where it occurs: Possibly on any cheese.

Attribute/Defect: Considered a defect.

Possible causes: Defect in packaging material or application process.

Synonym: Mold on surface, surface mold.

Related terms: Mold under wrap, mold under wax, mold under bandage.

UNIFORM

Definition: Cheese has an evenness to it. Can be used to describe the rind, shape, size, and ripening of a cheese, and shape, size and distribution of eyes. **Synonym:** BALANCED

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Related terms: CROOKED, EYES, Lopsided, ONE SIDED, UNEVEN, Uniform, UNDERSET

UNNATURAL Definition: Unnatural indicates the presence of a color not expected in that style of cheese. Styles where it occurs: Possible in any natural or processed cheese. Attribute/Defect: Defect. Related terms: FADED, MOTTLED, BLEACHED, wavy.

WAVY

Definition: An uneven color that appears as layers or waves in the cheese paste. **Styles where it occurs:** Most common and obvious in cheeses colored with annatto. **Attribute/Defect:** Defect. **Related terms:** MOTTLED, UNNATURAL.

WEAK RIND

Definition: The exterior surface of a cheese with a rind is thin and weak and offers little resistance to force or pressure. Attribute/Defect: Defect. Related terms: SOFT rind, SOFT SPOTS. WET RIND Definition: Moisture adheres to the surface of the cheese and may or may not cause softness. Styles where it occurs: Possible in any cheese. Attribute/Defect: Defect. Related terms: FREE MOISTURE, surface moisture.

WET SURFACE Definition: The surface of cheese displays visible moisture. Attribute/Defect: Defect. Related terms: WET RIND, FREE MOISTURE.

AROMA AND/OR FLAVOR:

ACETALDEHYDE

Definition: "Green apple" flavor **Reference Point:** Plain yogurt, Granny Smith apple, Apple flavored Jolly Rancher® **Styles where it occurs:** Yogurt **Attribute/Defect:** Although some acetaldehyde is expected in yogurt, none (flat) would be atypical, and a high level (out of balance) would be considered a defect. **Possible causes:** If the starter culture, *L. bulgaricus* (stimulated at higher incubation temperatures (112°E 44.4°C)) dominated the fermentation, acetaldehyde could become excessive. Using too much

(112°F, 44.4°C)), dominated the fermentation, acetaldehyde could become excessive. Using too much green apple flavoring could lead to the defect. **Synonym:** Green apple

Related terms: ATYPICAL, Harsh, SHARP

AFTERTASTE see FINISH

AMMONIA/AMMONIATED

Definition: Aroma associated with cat urine, often associated with soft-ripened cheeses that have been aged too long.

Reference Point: Cat litter box, diluted household ammonia **Styles where it occurs:** Brie, Camembert, etc.

Attribute/Defect: While some consumers like a hint of ammonia in soft-ripened cheeses, excessive ammonia is almost always considered a defect.

Possible causes: Breakdown of protein and production of ammonia with extensive proteolysis and extended storage.

Synonym: Catty Related terms: Over Ripe, RIPE

ANIMAL

Definition: Distinct aroma and/or flavor associated with cow, goat, sheep.

Styles where it occurs: Possible in all fermented dairy products.

Attribute/Defect: In many cases, it is important to be able to recognize that a cheese was made with milk from a given species. However, when the aroma and/or flavor is extreme, it can become objectionable. Possible causes: Over-agitation of milk (lipolysis), unsanitary conditions Synonyms: Cowy, Goaty, Sheepy Related terms: BARNY, UNCLEAN

AROMA

Definition: Aroma is the overall impact of a cheese or dairy products' odor. It is one of the main families that is evaluated during an assessment. The term is usually qualified by a modifying adjective. **Attribute/Defect:** Aroma can be either a positive attribute or a defect, and these factors are determined by the style of cheese being evaluated and the intensity of the aromas. **Related terms:** FLAVOR, MOUTHFEEL, VOLATILES

BARNY/BARNYARD

Definition: A flavor characteristic of the milking barn, stable, or animal yard.

Reference Point: Barny or animal aroma or aftertaste. Some evaluators can attribute flavors to specific animal types: goat, sheep, cow.

Styles where it occurs: Possible in any natural cheese.

Attribute/Defect: Considered a defect depending on what is expected of a particular style.

Possible causes: Unclean milk, undesirable microbial growth, "goaty" is associated with volatilized shortchain free fatty acids (butyric, caprylic, capric acids).

Synonym: Cowshed, animal

Related terms: ANIMAL, UNCLEAN, funky.

BROTHY

Definition: Savory taste (umami) and flavor associated with proteins and/or the aromatics and flavor of broth.

Reference point: Boiled meats and broths, mushroom stock **Synonyms:** Savory, MEATY, UMAMI **Related term:** WHEY

BUTTERMILK

Definition: Flavor and aroma characteristic of the taste and smell suggested by diacetyl, associated with butter or the fermented beverage buttermilk.

Reference Point:

Styles where it occurs: Often present in fermented dairy.

Attribute/Defect: Generally considered as an attribute, it is commonly a subtle flavor and aroma in cheese and dairy.

Related terms: BUTTER, BUTTERY notes, DIACETYL.

BUTTERY

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Definition: Sweet cream and fresh lactic flavors and aromas that are typically associated with butter. Can also refer to texture and mouthfeel of a cheese. The term is associated with the chemical diacetyl, produced by some species of lactic acid bacteria.

Reference point: Butter – both unsalted and salted; butter-flavored popcorn **Synonym:** Diacetyl **Related terms:** CREAMY, LACTIC

CARAMEL

Definition: An aroma that is reminiscent of cooked sugar and milk. **Reference point:** cooked sugar, brown sugar, toasted butter flavor. **Styles where it occurs:** Goudas, Cheddars, Alpine, aged Parmesan styles **Related terms:** COOKED, HEATED, SCORCHED, SWEET

CHEESY

Definition: In butter, the term cheesy is considered a defect because butter should taste like butter, not cheese.

Reference Point: Blend softened butter with any shredded or ground cheese to mimic the cheesy defect. **Styles where it occurs:** Butters

Attribute/Defect: Interesting cheesy flavors in butter may not be considered objectionable in cultured cream butter, but are a defect in sweet cream butter.

Possible causes: Contamination with lactic acid bacteria; fermentation of whey not removed during working.

Related terms: ACID, OLD CREAM/OLD MILK, SOUR, UNCLEAN

CHEMICAL See MEDICINAL

CITRUS

Definition: Flavor and aroma characteristic of the taste and smell suggested by citric acid and associated with citrus fruits such as lemon.

Reference Point:

Styles where it occurs: Present in many fermented fresh cheeses such as chevre.

Attribute/Defect: Considered an attribute, it is commonly a more subtle flavor and aroma in cheese and dairy.

Synonym:

Related terms: CITRUS Notes, lemon, lemony.

COOKED

Definition: A somewhat nutty, custard-like aroma and sweet taste may be notable; Sulfide compounds may arise with excessive heating.

Reference Point: Ultrapasteurized milk; Ultra-high temperature processing (UHT) milk

Styles where it occurs: Cottage cheese

Attribute/Defect: Considered an attribute in some applications and to some cultures; considered a defect if extreme.

Possible cause: Overheating of dressing during pasteurization

Synonym: HEATED

Related terms: CARAMEL, NUTTY, SCORCHED, SULFIDE, SWEET

CREAMY See BUTTERY, LACTIC, TEXTURE, WEAK

DIACETYL

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Definition: Flavor and aroma characteristic of the taste and smell suggested of butter, buttermilk, or butterscotch. Associated with cheese, yogurt, and fermented dairy beverages. **Reference Point:**

Styles where it occurs: Present in many fermented dairy products.

Attribute/Defect: It is considered as an attribute and a desirable flavor and aroma in dairy. **Related terms:** BUTTER, BUTTERY notes, BUTTERMILK, butterscotch.

EARTHY

Definition: A flavor or aroma reminiscent of moist soil or slight mustiness.

Reference point: Potting soil, mushrooms, potatoes

Styles where it occurs: All fermented dairy products

Attribute/Defect: Defect in many styles but can be a positive attribute in cave-aged/mold-ripened styles. **Possible cause:** Flavors or aromas could also come from affinage environment and techniques. **Related terms:** FEED, MOLDY, MUSHROOM

FEED

Definition: Presence of one or more feed flavors carried through the milk into the aromatics of the finished product. In extreme cases, garlic and/or onion flavors may be noted.

Reference point: Hay, dried grass, silage, spent grains, alfalfa, green grass, parsley, green pepper **Styles where it occurs:** All fermented dairy products

Attribute/Defect: It can be desirable or undesirable depending on the intensity and style of dairy product. **Possible causes**: Results from feeding a particularly pungent feed or silage, or not withdrawing the feed within a suitable time frame prior to milking.

Related terms: Alfalfa, EARTHY, Garlic, GRASSY, Green, ONION

FERMENTED

Definition: An aroma and flavor that is reminiscent of vinegar (acetic acid), fermented whey, or fermented fruit.

Reference Point: Acetic acid, pineapple juice with vinegar, wines

Styles where it occurs: Cheddar styles, other fermented dairy products

Attribute/Defect: Generally considered a defect in Cheddar styles, though some might find a fermented flavor interesting.

Possible causes: Low milk quality, non-starter lactic acid bacteria, excess moisture (free whey) **Related terms:** FRUITY, GASSY, SOUR, WHEY/WHEY TAINT, YEASTY

FINISH

Definition: Flavor that remains after chewing and swallowing cheese samples. In judging, it is typically used in conjunction with a description of the intensity/length of the aftertaste and may be associated with adjectives like "short" or "long."

Styles where it occurs: All fermented dairy products **Related terms:** AFTERTASTE, FLAVOR

FLAT/LACKS FLAVOR

Definition: Dairy products that contain no undesirable flavor, but very little, if any, characteristic flavor are typically described as FLAT.

Reference Point: Unsalted butter, mild Cheddar cheese

Styles where it occurs: All fermented dairy products

Defect: Although not a serious defect, a dairy product faulted as flat does not meet expectations.

Possible causes: Low salt, early stages of ripening, improper culture selection

Related terms: ATYPICAL, COURSE

FLAVOR

Definition: Flavor is experienced as a combination of the basic tastes (sweet, sour (acid), salty, bitter, umami), volatile aromatics, mouthfeel, and aftertastes. Flavor can come from the natural cheesemaking and aging process as well as added flavorings like non-milk ingredients such as herbs, spices, condiments, rubs, or washes and wash solutions. The experience of flavor can be measured by intensity and qualified with adjectives such as low or atypical.

Styles where it occurs: All fermented dairy products

Attribute/Defect: This can be a defect depending on what is expected for that style and age. Flavor defects are often described with the following terms: Low, high, lacking (flat), or atypical (not associated with that style)

Possible causes: Flavor comes from the milk, cultures, production, and ripening (lipolysis, proteolysis as gateways to volatile aromas).

Related terms: AROMA, ATYPICAL, Excess, FINISH, Unbalanced, VOLATILES

FLORAL

Definition: Aroma characteristic of flowers. Present in milk and dairy when animals graze in pastures containing wildflowers, or where petals have been applied to the surface of a cheese.

Styles where it occurs: Dairy products that have flower petals applied to their surface or

made from milk where animals have been grazing on wildflowers.

Attribute/Defect: Attribute.

Related terms: Aromatic, SWEET, HERBAL.

FOREIGN

Definition: The term foreign may refer to a flavor that is not expected in a dairy product, or foreign matter (an unexpected ingredient or object).

Reference Point: Hair, insect, herbs, metal fragment, etc.

Styles where it occurs: All fermented dairy products

Attribute/Defect: Foreign flavors may not always be considered objectionable, if interesting. However, foreign matter is considered an adulterant (undeclared ingredients), so it is always a defect.

Possible causes: Foreign flavors can result from non-starter bacteria. Foreign matter results from contamination and lack of quality control.

Related terms: ATYPICAL, Chemical, MEDICINAL, METALLIC

FRESH(NESS) – Fresh dairy, fresh milk, fresh cream

Definition: Flavor characteristic of clean fresh dairy or fresh milk. **Styles where it occurs:** Mild yogurt, fresh cheeses, cheeses with little or no detectable acid or tart flavor noted.

Attribute/Defect: Attribute. Desired quality in fresh cheeses. **Related terms:** Fresh dairy, fresh milk, fresh cream.

FRUITY

Definition: Flavor or volatile aroma reminiscent of fruit.

Reference points: Fresh apples, grapes, pears, pineapple, and other tropical fruits.

Styles where it occurs: Cheddar, Swiss, aged Italian styles, goudas, Alpine styles

Attribute/Defect: Certain cheeses have a sweet fruit-like flavor that generally grows more intense with age. While some consider it undesirable, others consider it an interesting complexity in aged cheeses. **Possible causes:** Certain starters and non-starter bacteria, enzymatic activity, microbial activity. Low acid, high moisture, low salt, poor milk quality.

Related terms: FERMENTED, Green, VOLATILES, WHEY/WHEY TAINT, YEASTY

GRASS - GRASSY

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Definition: Grass or pasture flavor forward. Feed flavor carried into the cheese.

Reference Point: Cheese made from "Grass-fed" herds.

Styles where it occurs: All fermented dairy products.

Attribute/Defect: Attribute for "grass-fed" cheese. Excess grass notes can be considered a defect in some cheeses.

Synonym: Vegetal.

Related terms: HERBAL, WEEDY, UNCLEAN, FEED.

HEATED

Definition: Cheese may have a flavor and volatile aromatics reminiscent of pasteurized process cheese. Reference point: Melted plastic, old milk, heated whey, pasteurized process cheese Styles where it occurs: Cheddar, cheese spreads, pasteurized process cheese Possible cause(s): Processing temperatures exceeded those of standard pasteurization Synonyms: COOKED Related terms: CARAMEL, SCORCHED, VOLATILES

HERBAL

Definition: A taste due to the processing of milk which possesses the aroma of aromatic plants. Present when animals graze in pastures containing herbs. **Styles where it occurs:** Possible in any dairy product. **Attribute/Defect:** As with "grass" or "grassy" can be an attribute, less pleasant tastes from other vegetation would commonly be considered a defect. **Related terms:** ONION, FEED, GRASS, GRASSY.

HISTAMINE BURN or HISTAMINE REACTION

Definition: A sensation of tingling or itchiness that occurs during and after consuming cheese containing elevated levels of histamine. A reaction involving lips, tongue, and mouth. Reaction can include flushing or headache.

Styles where it occurs: Most common in cooked long aged raw-milk cheeses, particularly Alpine styles (Swiss styles) – due to presence of bacteria that break down histidine to histamine. Hard Italian cheeses like aged Parmesan frequently have elevated levels of histamine. Reaction varies between individuals. **Attribute/Defect:** Defect.

Possible causes: Reaction to excess histamine caused by the breakdown of

amino acids by histamine producing bacteria, elevated storage temperatures, high pH, and salt concentrations.

Related terms: Tingly, prickly, heat, itchy, Parm rash.

LACTIC

Definition: A family of aromatics that include milk, cultured cream, and buttermilk. Products exhibit bright, clean aromas and flavor associated with fresh milk.

Reference point: Fresh, uncultured milk, heavy cream, δ-Dodecalactone **Styles where it occurs:** All fermented dairy products, especially fresh cheese **Related terms:** ACID, Buttermilk, BUTTERY, CREAMY, Milk Fat, Milky, SOUR

LIPASE See RANCID

MALTY

Definition: Presence of a distinctive flavor suggestive of malt; derived from a germinating cereal grain in water, typically barley, and then cutting the process short by drying the grain with hot air. **Reference point**: Malted milk shakes, or the flavor of milk left in the bowl after eating Grape-Nuts® or Cheerios®.

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Styles where it occurs: Cottage cheese, other hard cheeses
Defect: Because bacterial contamination is the cause, malty is considered a defect.
Possible cause: Volatile aromatics produced by spoilage microorganisms (specifically *Lactococcus lactis* ssp. *maltigenes*); poor sanitation; thermal abuse
Related terms: SWEET

MEATY

Definition: Associated with the aromatics and flavor of broth and/or umami. Reference point: Beef/Chicken broth Styles where it occurs: Cheddar, Alpine styles, Hard/Firm Cheeses Synonyms: BROTHY, Savory, UMAMI

MEDICINAL

Definition: Aroma and/or flavor is of chemicals not expected in cheese. **Reference Point:** Chlorine, iodine, ammonia

Styles where it occurs: More typical in aged cheeses but could occur in any product if contaminated with chemicals.

Attribute/Defect: While slight ammonia aromas may be acceptable, most medicinal aromas are considered objectionable.

Possible cause(s): Chemical contamination; some strong herbs or feeds may induce chemical aromas in products; protein breakdown.

Related terms: CHEMICAL, FOREIGN, METALLIC

METALLIC

Definition: Flavor trait suggestive of metal that imparts to the mouth a puckery sensation.

Reference point: Copper (penny), iron, blood (if you cut inside your mouth), 0.01% copper sulfate solution, canned pineapple juice

Styles where it occurs: Cheddar, Hard/Firm Cheeses

Defect: Metallic is almost always considered a defect.

Possible cause: Can be related to salt issues. Sea salt (contains minerals) and salt replacers (e.g. potassium chloride) often impart a metallic taste to products.

Synonym: Copper, FOREIGN, Iron, MEDICINAL, "Tin Can" Flavor

MUSHROOM(Y)

Definition: Flavor or aroma reminiscent of mushrooms.

Reference point: Freshly cut mushrooms

Styles where it occurs: Soft-ripened styles, natural rinds

Attribute/Defect: Mushroom is considered an attribute in many soft-ripened cheeses. However, it can be a defect, depending on what is expected for that style and age. Low, high, lacking (flavor isn't undesirable, but isn't there), atypical (not associated with that style). **Related terms:** EARTHY

NUTTY

Definition: A flavor characteristic of ground or roasted nuts, or nut butter.

Reference Point: Nut oil, nut butters, toasted nuts.

Styles where it occurs: Cheddar, Swiss, Alpine Styles, Gouda, others.

Attribute/Defect: Considered an attribute and if lacking when expected may be considered a defect (flat or atypical).

Related terms: Toasted, cooked.

OLD CREAM/OLD MILK

Definition: Butter initially smells sour but does not clean up quickly; leaves an unpleasant aftertaste. Can be soapy, stale, fishy, or oily.

Reference Point: Smells like stale buttermilk powder or an improperly sanitized creamery.

Styles where it occurs: Butter

Defect: Old cream is always considered a defect

Possible causes: Poor sanitation, storage of milk or cream, elevated temperature during storage **Related terms:** CHEESY, OLD INGREDIENT, Stale, STORAGE, UNCLEAN

OLD INGREDIENT

Definition: A term used to describe yogurt that contains an old ingredient (Nonfat dry milk (NFDM), fruits, etc.); a "stale" or bitter aftertaste persists after swallowing. Old ingredient specifically refers to an ingredient, rather than to storage of the product itself.

Reference Point: May smell or taste like stale nonfat dry milk (NFDM) powder, may be a spoiled piece of fruit. **Styles where it occurs:** Yogurt, cottage cheese

Defect: Old ingredient is always considered a defect.

Possible cause: Stale ingredients

Related terms: OLD CREAM/OLD MILK, Stale, STORAGE, UNCLEAN

ONION

Definition: Flavor and aroma characteristic of the taste and smell suggested by its name. Present when animals producing milk used in cheesemaking have eaten garlic, onion, or leeks. **Styles where it occurs:** Possible in any natural cheese where animals are allowed to graze. **Attribute/Defect:** When perceived as definite or pronounced it is considered a defect as it can dominate the more subtle flavors and aromas of a cheese.

Related terms: FEED, WEEDY.

OXIDIZED

Definition: Visual and/or flavor defects related to the exposure of cut surface to oxygen and light. The oxidized defect also manifests in cottage cheese (cardboard flavor) and butter (cardboard, freezer burn). **Reference point:** Cheese may have a pink hue (instead of orange) on the surface and taste a bit like cardboard or brown paper towel.

Styles where it occurs: All fermented dairy products

Defect: Although intended in traditional Swiss, oxidized is almost always considered a defect in other dairy products.

Possible cause: Exposure to oxygen or light for extended period of time causes off flavors to develop. **Synonym:** PINKING

Related terms: COLOR, FADED

RANCID

Definition: Hydrolytic rancidity causing flavor and aroma of butyric acid. Most people are sensitive to a very low level of rancidity. A bitter or disagreeable taste and/or odor suggestive of baby vomit.

Reference point: Rancidity lends characteristic flavor to the following cheese styles: Asiago, Cotija, feta, Romano, Provolone cheeses

Styles where it occurs: All fermented dairy products

Attribute/Defect: Considered a defect depending on what is expected of a particular style.

Possible causes: Lipase addition, growth of psychrotrophs in stored milk. Derived from decomposed milk fat.

Related terms: baby vomit, soapy, unclean.

RIPE

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Definition: Refers to a cheese that is at its peak in terms of flavor, aroma, and gustatory experience. It is ideal to consume a cheese when it is ripe.

Styles where it occurs: All fermented dairy products Related terms: À point, AMMONIA/AMMONIATED, Over ripe, Under ripe

SANITIZER

Definition: Flavor suggesting incomplete rinsing of equipment that has been sanitized. lodine or chlorine. **Styles where it occurs:** Possible in any dairy product.

Attribute/Defect: Chemical tastes can easily dominate flavors and would always be considered a defect.

Related terms: UTENSIL, CHEMICAL, UNNATURAL.

SCORCHED

Definition: Butter has a caramel or butterscotch flavor

Reference point: Caramelized butter

Styles where it occurs: Butter

Attribute/Defect: Although relatively appealing and may earn points from an ACS Aesthetic Judge during an evaluation, scorched is considered a technical defect.

Possible cause: Overheating of cream used for buttermaking

Synonym: Heated

Related terms: CARAMEL, Caramelized, COOKED, SWEET

SHARP

Definition: Although there is no agreed-upon definition of the term, sharp is commonly used to refer to cheese that has some level of intensity, usually associated with acidity, though other flavors can also qualify as sharp to some – such as bitter or complex. It can also be used as a way to refer to aged Cheddar – as opposed to "mild" for young Cheddar, though there is no agreed-upon age difference across regions and producers.

Styles where it occurs: Used most often in Cheddar **Related terms:** ACETALDEHYDE, ACID, Piquant, SOUR, SULFIDE

SMOKEY/SMOKY

Definition: The presence of smoke-like aromas and flavors in cheese. **Reference point:** Campfire, Barbecue, Bacon, Bologna **Styles where it occurs**: Smoked cheese, but also in Alpine styles

STALE

Definition: Flavor and aroma defined as flat, musty, wet cardboard-like, lacking fresh dairy notes, sometimes accompanied by oxidized notes. Flavor indicating the lack of freshness in the milk used in cheese manufacture.

Styles where it occurs: Possible in any fresh dairy past recommended shelf-life, product that has been temperature abused or made from old milk.

Attribute/Defect: Defect.

Synonym: Lacking freshness, old milk. **Related terms:** FLAT, MUSTY, bland, OXIDIZED.

STORAGE

Definition: Butter sometimes takes on the aroma of items stored in the refrigerator (i.e., a green pepper). The initial aroma may be stale and objectionable, but the aftertaste is typically not.

Styles where it occurs: Butter

Defect: Storage is typically considered a technical defect.

Possible cause: Butter is stored too long in the refrigerator. **Related terms:** Lacks freshness, OLD CREAM/OLD MILK, OLD INGREDIENT, Stale

SULFIDE

Definition: A typical flavor of sharp/aged Cheddar, sulfides have a flavor reminiscent of hard-boiled eggs or matchsticks.

Reference point: Hard-boiled eggs, Ultra-high treatment processing (UHT) milk

Styles where it occurs: Aged Cheddars

Attribute/Defect: Can be either – certain regions (like the Northeast U.S.) will tend to see this flavor more, but if excessive, it can be considered a defect.

Possible causes: Milk microflora, certain adjunct cultures

Related terms: COOKED, SHARP, Skunky, Sulfur

TART

Definition: Characteristic of acid, a puckery taste sensation. A taste which is characteristic of lactic acid. **Reference Point:** Tart is frequently used in defining the level of acidity in yogurt. **Styles where it occurs: Attribute/Defect: Related terms:** ACID, SHARP, SOUR.

TOASTED

Definition: Characteristic taste of a food browned by heat, slightly caramelized. **Reference Point:** Heating during processing produces a flavor profile similar to toasted nuts or caramel. **Styles where it occurs:** Aged Gouda, Alpine styles, Hard Italian cheeses.

Attribute/Defect: Considered an attribute.

Related terms: CARAMEL, caramelized, NUTTY, slightly COOKED.

UNCLEAN

Definition: Used to describe a general dirty flavor, aroma, or lingering aftertaste. Often used by technical judges to describe volatile aromatics. In Cheddar, it is a complex cheese flavor resulting from the fermentation of whey during the aging process. Can be similar to whey taint, though generally something described as "unclean" will have a longer residual impact on the taster.

Styles where it occurs: Commonly used in Cheddar grading but can be used to describe many styles of aged cheese.

Attribute/Defect: Generally seen as a defect. May be seen in concert with other defects, like high acidity, bitterness, or whey taint. However, because unclean is complex and interesting, it is not always considered a defect.

Possible cause: Whey fermentation, microflora from milk, poor milk quality, using older milk, interaction among pH/moisture/fat/enzymatic activity

Related terms: Aftertaste, ANIMAL, BARNY, BITTER, CHEESY, Complex, Dirty, Finish, OLD CREAM/OLD MILK, OLD INGREDIENT, Putrid, RANCID, WHEY/WHEY TAINT

UTENSIL

Definition: Flavor suggestive of improper or inadequate washing and sanitation of milking equipment, or same with cheese making tools or equipment.

Reference Point:

Styles where it occurs: Possible in any natural cheese.

Attribute/Defect: Whether observed as inadequate cleaning or rinsing it would always be considered a defect.

Synonym: UNCLEAN.

Related terms: SANITIZER, CHEMICAL.

VEGETAL

Definition: A more general description of milk or dairy from animals that have been on pasture, including grassy, floral, weedy, or herbal notes.

Styles where it occurs: Possible in any dairy product from milk produced by animals that have been fed primarily on pasture.

Attribute/Defect: Attribute unless excessive or overwhelming. **Related terms:** GRASSY, WEEDY, HERBAL, FLORAL.

VOLATILES

Definition: The experience of flavor through aroma. Aroma is experienced through the volatility of the chemical compounds that are a result of flavor. Volatile chemical compounds – compounds that are able to evaporate – are noted when transported to the olfactory system through smelling or chewing a product. This is experienced through the back of the throat.

Related terms: AROMA, FLAVOR, Fragrance, FRUITY, Retronasal, Volatile Aromas

WEEDY

Definition: A taste due to the processing of milk possessing the aroma of common weeds. Present when animals eat weedy hay or graze in weedy pastures. **Styles where it occurs:** Possible in any dairy product. **Attribute/Defect:** If perceived as "grass" or "grassy" can be an attribute, less desirable tastes from other vegetation would commonly be considered a defect. **Related terms:** ONION, FEED, GRASS, GRASSY.

WHEY/WHEY TAINT

Definition: 1) Butter: Whey manifests both in flavor and body. The melting properties and flavors are more reminiscent of margarine than butter. 2) Cottage cheese: Excess whey produces a brothy flavor. 3) Cheese: Slight sweet-acidic flavor and odor of fermented whey caused by too slowly or incompletely drained curds. Often the flavor is short-lived, in contrast to a similar flavor you might see in cheese called "unclean".

Reference point: Fermented whey

Styles where it occurs: Cheddar

Attribute/Defect: Generally seen as a defect, though in an aged cheese it can be a component of a complexity of flavor.

Possible causes: 1) Butter: Whey cream is used; 2) Cottage cheese: Curds are not washed adequately before creaming; excess whey is utilized in the cream dressing; 3) Cheese: Residual/retained cheese whey that ferments during the aging process.

Synonym: Whey stain

Related terms: BROTHY, FERMENTED, FRUITY, UNCLEAN

YEAST(Y)

Definition: A distinctive yeast-like aroma is present. Yeasts are an integral part of many rind microflora, but in overabundance could produce an overpowering yeast-like aroma.

Reference point: Rising bread dough, marmite

Styles where it occurs: Natural rind cheeses, bloomy rind cheeses

Attribute/Defect: Yeasty is not objectionable in washed rind cheeses. When observed yogurt, cottage cheese, and other fresh dairy products, yeasty is always a defect. It is often considered a defect in semi-soft and hard styles of cheese as well.

Possible Cause: Yeast contamination and outgrowth

Related terms: FERMENTED, FRUITY, GASSY

BASIC TASTE:

ACID

Definition: A basic taste associated with lactic acid production. Cheeses are evaluated and assessed based on the intensity of the experience of this taste.

Reference Point: Lemon/lime, citric acid

Styles where it occurs: Possible in all fermented dairy products.

Attribute/Defect: Some level of acid is expected in most fermented dairy foods, but it can be considered a defect in certain contexts (e.g., if too low in yogurt; if too high in mild Cheddar).

Possible causes: Use of high acid milk, too much lactic acid production by cultures, high moisture. In fresh unripened cheeses, acid that is too high indicates possible temperature abuse – fermented too high or too long. Improper use of salt or temperature control can also cause improper acid levels in dairy products.

Synonym: SOUR

Related terms: ATYPICAL, Bright, CHEESY, Citrus, LACTIC, SHARP, Tangy, Tart

BITTER

Definition: Basic taste sensation; often experienced at the back of the tongue; for many people it is slower to perceive and longer-lasting than other taste sensations.

Reference Point: Caffeine, quinine, radicchio

Styles where it occurs: Possible in all dairy products

Attribute/Defect: Bitterness perception is highly variable in humans. Some bitterness may be acceptable in certain cheeses when it is in balance (e.g. aged Cheddar). Bitterness is considered a defect in all fresh dairy products.

Possible causes: Extended storage of milk, microbial contamination, high level of psychrotrophic microorganisms, overly active starter cultures, low salt levels, excessive rennet, excessive moisture, poor milk quality, excess acidity, excessive use of certain sanitizers, poor quality ingredients. **Related terms:** ASTRINGENT, RANCID, UNCLEAN

SALT(Y)

Definition: Salt is a basic taste, and it is an essential ingredient in the cheesemaking process. **Reference point:** NaCl

Styles where it occurs: All fermented dairy products

Attribute/Defect: Too much or too little salt can cause technical errors in the cheesemaking process, and if it is too low or too high, it is considered a defect. High levels of salt can limit flavor development but also mask off-flavors, while low levels of salt can lead to more nuanced flavor development but also allow off-flavors to present themselves more readily.

SOUR

Definition: Non-volatile taste sensation. Pungent acidic aroma/flavor resembling sour cream. **Reference point:** Citric Acid, citrus, sour cream

Styles where it occurs: All fermented dairy products

Attribute/Defect: In most cheeses, it is a fundamental component of the flavor profile. The lack of, or excess of, characteristic acidity/sour flavors can be a defect in all cheeses. Also used by some to describe a cheese that has an appropriate amount of acidity but is lacking in other flavor profile components.

Possible cause: pH and water activity can affect how the acidity develops, or doesn't, during the ripening process leading up to evaluation.

Synonym: ACID

Related terms: CHEESY, FERMENTED, LACTIC, SHARP

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SWEET

Definition: Basic taste sensation elicited by sugars; some stabilizers are associated with sweetness. **Reference point:** 5% sucrose in water

Styles where it occurs: High sweetness is considered a defect in yogurt or cottage cheese; some sweetness is expected in many dairy products (sweetened yogurt, sweet cream butter, mascarpone, etc.). **Attribute/Defect:** In most styles it would be considered a positive attribute, unless excessive or especially dominant.

Related terms: CARAMEL, COOKED, MALTY, NUTTY, SCORCHED

UMAMI

Definition: The term literally translates to "delicious" in Japanese. It is the meaty/brothy basic taste associated with proteins and amino acids.

Reference point: Monosodium glutamate (MSG) diluted in water, chicken broth without herbs **Styles where it occurs:** All fermented dairy products

Synonym: BROTHY, MEATY

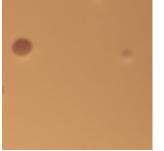
Related terms: Protein, Savory

EYE DEVELOPMENT AND/OR APPEARANCE:

BLIND

Definition: Absence of eyes in a cheese expected to have eyes. It may be either the entire cheese or large areas lacking eyes.

Reference Point:



Styles where it occurs: Swiss styles, Alpine styles

Defect: Eyes are expected in specific products, so when they are absent, blind will be indicated on the score sheet.

Possible causes: Lack of propionic acid fermentation, cheese too acidic, cheese body too firm **Related terms:** CLOSED, EYES, UNDERSET

BLOW HOLE

Definition: Excessive gas producing large undesirable voids in cheese body ranging from the size of a golf ball to the size of a fist or larger. **Styles where it occurs:** Swiss, Gouda, eyed varieties. **Attribute/Defect:** Defect. **Synonym:** BLOWN.

BLOWN

Definition: The integrity of the cheese is destroyed by excessive gas production. Blown cheese often exhibits large void areas and collapsed structure. **Reference point**:

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Styles where it occurs: Swiss styles, possible in other hard cheeses as well.

Defect: Blown cheeses are typically unsalable except as a low-value ingredient for pasteurized process cheese.

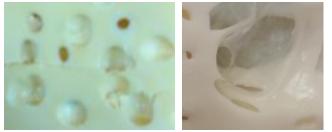
Possible causes: Uncontrolled gas formation, high moisture, soft cheese body, late-blowing by *Clostridia* species

Related terms: CABBAGE, COLLAPSED, GASSY, OVERSET, Lopsided

CABBAGE

Definition: Eyes so numerous they crowd each other leaving a thin membrane of cheese between, causing a cabbage-like appearance.

Reference point: The left image presented shows a slight extent of cabbage defect, the right image shows a more pronounced example.



Styles where it occurs: Eyed varieties, Swiss styles.Defect: Considered a technical defect, will cause cheese to be downgraded.Possible causes: Too rapid gas production, weak body, or curd disturbed during press under whey, causing large weak areas in the paste.

Related terms: Overset, collapsed eyes, streuble.

CHALKY EYES

Definition: Eyes which lack a shiny luster, which appear chalky or DULL. **Styles where it occurs:** Swiss styles. **Attribute/Defect:** Defect. **Related terms:** DULL EYES, DEAD EYES.

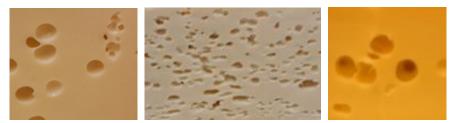
CHECKS

Definition: Small short cracks within the body of the cheese.
Styles where it occurs: Swiss, possible in most natural cheeses.
Attribute/Defect: Defect.
Possible causes: Cheese body lacking elasticity during eye formation, too low pH from excess acid production.
Related terms: PICKS, Cracks.

COLLAPSED

Definition: This term is used in relation to the appearance of a cheese. It refers to 1) Cheese structure appears to have collapsed or flattened, or 2) Eyes have not formed properly and do not appear round or slightly oval, but rather flattened.

Reference point:



Styles where this occurs: 1) Possible in all cheeses, 2) Swiss styles.

Defect: When Swiss-type cheeses lack the attractive eye appearance that is expected, they may be downgraded.

Possible causes: Abnormal moisture/pH, presence of *Clostridia* bacteria, spontaneous fermentation, uneven moisture

Related terms: BLOWN, CABBAGE, EYES, FROG MOUTH

CONDIMENT DISTRIBUTION (EXCESS / LACKING INCLUDING SMOKE)

Definition: Cheese with an excess amount (density), or displaying uneven distribution or spacing of a condiment, including smoke. **Styles where it occurs:** Condimented or smoked varieties. **Attribute/Defect:** A defect. **Related terms:** UNEVEN.

CROOKED See **UNEVEN**

DEAD EYES

Definition: Eyes have lost a glossy appearance – rough – see DULL EYES. **Styles where it occurs:** Swiss styles. **Attribute/Defect:** Defect. **Related terms:** DULL EYES, DEAD EYES, CHALKY EYES.

DULL

Definition: 1) Interior of eyes lack shiny quality, and are dull, not glossy. 2) The color of a cheese is not vibrant.

Styles where it occurs: 1) Swiss 2) All dairy products.

Defect: Dull makes the cheese look lifeless, limiting its aesthetic appeal.

Possible causes: 1) Too much fat in milk and curd, poor whey drainage; 2) issues with pH, low milk quality.

Related terms: COLOR, EYES, FADED, Pale

DULL EYES

Definition: Eyes have lost some of their luster, no longer glossy or shiny. **Styles where it occurs:** Swiss styles. **Attribute/Defect:** Defect. **Related terms:** DEAD EYES.

EYES

Definition: Round open areas, of varying size, within the paste of a cheese, related to gas formation. This is different from OPEN, which refers to mechanical openings in a cheese. Swiss cheese has a well-defined lexicon, with many descriptions of the various types of eyes that present as attributes of the style or as defects.

Reference Point:

Almost everyone is familiar with the iconic image of Swiss cheese, with perfectly round, regularly spaced eyes ranging from 1/2 to 3/2 inch in size. In reality, there is much variability, as shown in the image below.



Irregularity of eye shape and size, along with some collapsed eyes, are exhibited in the image below.



Large eyes are shown in the image below, along with some collapsed, irregular, and misshapen eyes and slits.



Styles where it occurs: Swiss styles, hard Alpine styles, other hard cheeses

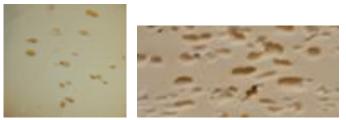
Attribute/Defect: Depending on the style of cheese, eyes can be considered a defect. In cheeses where eyes are expected, the size, shape, and concentration are evaluated based on what is typical of the style. The ideal Swiss eye size is $\frac{1}{4}$ inch (0.6 cm) to $\frac{1}{2}$ inch (1.27 cm) in diameter. Large is used to refer to cheeses where most eyes are more than 13/16 (2 cm) but less than 1 inch (2.5 cm) in diameter. Small is used when a majority of the eyes are less than 3/8-inch (1 cm) but more than 1/8 (0.38 cm) inch in diameter.

Possible causes: Ideal eye formation results from carbon dioxide gas production in cheese. In Swiss style cheeses, eye formation is a desirable result of CO_2 production that comes from the fermentation of propionic acid. Eyes can also be formed by spoilage bacteria. These eyes tend to be misshapen, and the cheeses tend to have unclean or atypical flavor profiles.

Related terms: BALANCED, BLIND, CABBAGE, CLOSED, COLLAPSED, DULL, FROG MOUTH, GASSY, IRREGULAR EYES, NESTY, ONE SIDED, OVERSET, STREUBLE, SWEET HOLES, UNDERSET, UNIFORM

FROG MOUTH

Definition: There are two definitions for Frog Mouth. 1) When interior of a wheel of cheese is split and looks like a frog's open mouth, 2) When the eyes have developed into lenticular or spindle-shaped openings in cheese. **Reference point:**



Styles where it occurs: 1) Whole wheels of cheese like Gouda or Jack. 2) Interior of Swiss **Defect:** Frog mouth is almost always considered a defect; when Swiss-type cheeses lack the attractive eye appearance that is expected, they may be downgraded.

Possible causes: Poorly developed/weak rind, mishandling of cheese, improper cooling, or cheese becomes too cold

Related terms: COLLAPSED, EYES, IRREGULAR EYES, OPEN

GASSY

Definition: Cheese contains gas holes of various sizes, which may be scattered or unevenly distributed throughout the cheese. Gas may appear as round holes or slits, depending on the source of gas, and/or body of the cheese. The term gassy is typically used when eyes are not expected, so it is considered a defect. OPEN is often confused for gassy, but their causes differ.

Reference point:



Styles where it occurs: May be a defect in any semi-solid or solid dairy product.

Defect: Gassy is considered a defect in any dairy product where it is not expected.

Possible causes: Indicative of uncontrolled gas formation, poor sanitation, late gas blowing. Can result from numerous species of gas-producing bacteria and yeast.

Synonym: OVERSET, Pin holes, SLITS, SWEET HOLES

Related terms: BLOWN, Bloated, EYES, FERMENTED, Huffed, YEASTY

IRREGULAR EYES

Irregular is used when eyes have not formed properly and do not appear round or slightly oval, and the eyes are not accurately described by other terms.

Reference Point:



Styles where it occurs: Swiss-style cheeses

Attribute/Defect: Although a variety of eye sizes is not objectionable, misshapen eyes will typically be considered a defect in Swiss-style cheeses.

Possible cause: Lack of control in fermentation; body of cheese and numerous nucleation sites allows many small eyes to form, without fusing

Related terms: EYES, FROG MOUTH, Misshapen eyes, NESTY, SWEET HOLES

NESTY

Definition: Overabundance of small eyes in a localized area, often just under the rind. **Reference point:** A small nesty area can be seen along the bottom right of this image.



Styles where it occurs: Swiss styles

Defect: Nesty is almost always considered a defect, but it is not as serious as some other eye defects. **Possible cause**: Abnormal gas fermentation, poor knitting of curd, reincorporation of chilled curd to initial pressing

Related terms: EYES, IRREGULAR EYES, ONE SIDED, STREUBLE

NUTSHELL

Definition: An eye that has a rough, nutshell-like appearance versus a smooth shiny surface.

Styles where it occurs: Eyed varieties, Swiss styles.

Attribute/Defect: Considered a technical defect.

Possible causes: Paste too acidic or poorly knit due to inadequate press or curd being disturbed under the whey.

Related terms: Dead eyes, dull eyes, irregular eyes.

ONE SIDED

Definition: Cheese that is reasonably developed with eyes on one side and under-developed on the other side.

Reference point:



Styles where it occurs: Swiss styles

Defect: When a product appears visually imbalanced or one-sided, it is considered a defect. However, it is not as serious as some other eye defects

Possible cause: High acid curd, improper knitting, poor pressing **Synonym:** UNEVEN **Related terms:** EYES, NESTY, STREUBLE, UNDERSET, UNIFORM

OVERSET

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Definition: Excessive number of eyes present in the body of the cheese that leads to an overcrowding of eyes.

Reference point:



Styles where it occurs: Swiss styles

Defect: Overset is almost always considered a defect; when Swiss-type cheeses lack the attractive eye appearance that is expected, they may be downgraded.

Possible cause: Late gas blowing, poor pressing of curd **Synonym:** GASSY

Related terms: BLOWN, EYES, CABBAGE, UNDERSET

PICKS

Definition: Very small, irregular, or ragged openings in the body of the cheese.
Styles where it occurs: Possible in any natural variety.
Attribute/Defect: Defect
Possible causes: Late or unwanted gas production, in Swiss styles inelastic body during eye formation.
Related terms: CHECKS, Cracks

ROUGH EYES

Definition: Eyes lacking smooth, even surfaces. Styles where it occurs: Swiss styles. Attribute/Defect: Defect. Related terms: SHELL EYES, NUTSHELL.

SHELL EYES Definition: Cheese with eyes that have walls that look like rough nut shells. Styles where it occurs: Swiss styles. Attribute/Defect: Defect. Related terms: Rough, NUTSHELL.

SPLITS

Definition: Larger cracks in the body of the cheese. Usually more parallel layers and cleaner cracks. Styles where it occurs: Possible in most natural cheeses. Attribute/Defect: Defect. Related terms: PICKS, CHECKS, Cracks.

STREUBLE

Definition: Overabundance of small eyes just under the surface of the cheese.

Reference point: The attached image also displays uneven eye distribution, small eyes, irregular, misshapen eyes, and blind areas.



Styles where it occurs: Swiss styles

Defect: When Swiss-type cheeses lack the attractive eye appearance that is expected, they may be downgraded.

Possible cause: Curd is disturbed as it is being pressed under whey **Related terms:** CABBAGE, EYES, NESTY, ONE SIDED

SWEET HOLES

Definition: Spherical gas holes, glossy in appearance, that are about the size of BB shot. **Reference point:**



Styles where it occurs: Swiss styles

Attribute/ Defect: When Swiss-type cheeses lack the attractive eye appearance that is expected, they may be downgraded.

Possible cause: Typically caused by coliforms.

Synonym: GASSY

Related terms: EYES, IRREGULAR EYES, OVERSET, Pinny, Small eyes

UNDERSET

Definition: Fewer eyes than desired/expected in a cheese expected to have eyes. **Reference point:** In addition to blind areas, the image exhibits uneven distribution of eyes and very small eyes.



Styles where it occurs: Swiss styles

Defect: Because some eyes are present, this is not as serious of a defect as other eye defects. **Possible cause:** Lack of activity of *Propionibacterium* sp. (eye formers), or inadequate time or temperature in warm room.

Related terms: ATYPICAL, BLIND, EYES, OVERSET, UNEVEN, UNIFORM

UNEVEN

Definition: Reasonably well to very well-developed eyes in some regions of the cheese and underdeveloped or lacking in other areas. Uneven eye formation or distribution. **Styles where it occurs:** Swiss styles. **Attribute/Defect:** Defect.

UNEVEN

Definition: 1) Cheese wheel or block is asymmetrical: higher on one side than on the other side. 2) In Swiss-style cheeses it can be used to refer to cheese where eyes are reasonably developed in some areas and under-developed in other areas.

Reference point:



Styles where it occurs: All in the former; the latter definition refers more to Swiss-style cheese. **Defect:** Because some eyes are present, this is not as serious a defect as other eye defects. **Possible causes:** 1) Uneven shape would most often be due to improper attention during pressing/turning. 2) Uneven turning, possibly the cheese was dropped, improper molding **Synonym:** ONE SIDED

Related terms: COOKED, CROOKED, EYES, Lopsided, Nonhomogeneous, UNDERSET, UNIFORM

GENERAL:

ATYPICAL

Definition: Certain characteristics are expected in products, especially those with a defined standard of identity. When a product does not meet expectations, the term atypical may appear in a judge's comments.

Styles where it occurs: Possible in all fermented dairy products.

Attribute/Defect: Atypical may be used to describe appearance/color, aroma, flavor, and/or body/texture of a product. Sometimes something atypical can set a product aesthetically apart, making atypical an asset.

Possible causes: Improper make conditions, aging conditions, and/or ingredient selection. **Related terms**: ACETALDEHYDE, ACID (High or Low), COLOR, FLAT, FOREIGN, Lacks FLAVOR, SALT, UNDERSET, Unnatural

BALANCED

Definition: The term is commonly used by judges to indicate that the product meets expectations for levels of attributes expected, with nothing in excess.

Attribute/Defect: Balanced is a desired attribute in all dairy products.

Synonym: UNIFORM

Related terms: EYES, Delicate, Mellow, Smooth, Even

SENSATION:

ASTRINGENT

Definition: Mouthfeel trait caused by the contraction of mucus membranes in response to taste and/or flavor experience. It is described by a puckering, or a rough, sandpapery feel on the oral mucosa. **Attribute/Defect:** Tolerance for astringency is very personal, however if astringency is out of balance in a product, it will be considered a defect.

Reference Point: Tannic foods (red wine, tea), unripe bananas **Synonym:** Mouth-drying

HEAT

Definition: Term may be used to describe a burning sensation in the back of the throat **Reference point:** Hot peppers, horseradish or wasabi, capsaicin **Styles where it occurs:** Blues, Cheddars, Swiss styles **Synonyms:** Burn, Itchy, Prickly, Spicy, Tingly

ITCHY

Definition: A mouthfeel and sensation of itchiness and tingling that occurs during or after consuming certain styles of cheese. This phenomenon is not well understood.

Styles where it occurs: Aged raw milk cheeses, cheeses with high levels of Lipase

Defect: Itchiness resulting from the consumption of food is unsettling for consumers, and, therefore, an undesirable characteristic.

Possible cause: Lipolysis (formation of free fatty acids), possible histamine reaction **Related terms:** Burn, Prickly, HEAT

TEXTURE - BODY:

BROKEN DOWN

Definition: The texture of a cheese that has changed from its initial smooth, curdy, coarse, or corky body to a waxy or runny condition.

Styles where it occurs: Any natural cheese.

Attribute/Defect: An attribute when a semi-hard cheese body is like cold butter. In a cheese that body that has deteriorated to a PASTY, MEALY or liquid like condition can be considered a defect. **Related terms:** WEAK, SOFT, PASTY, GUMMY, RUNNY.

CHALKY

Definition: A dry powdery mouthfeel perceived as a gritty or grainy sensation.
Reference Point: Often caused by excess acid production resulting in very fine particles.
CALCIUM LACTATE crystals also have a very chalky mouthfeel.
Styles where it occurs: Possible in any natural cheese.
Attribute/Defect: Visually and texturally, it would nearly always be considered a defect.
Related terms: Gritty, GRAINY, sandy.

COARSE

Definition: This term is used to describe the experience of flavor in butter. Sweet cream butter is expected to be delicate. Coarse means that the flavor is somewhat harsh or out of balance, but generally high quality.

Styles where it occurs: The term is most commonly used for high quality butter that is not perfect. **Attribute/Defect:** Coarse is not a serious defect in butter.

Possible causes: Starting cream had flavor compounds from animal feed; slightly high salt in final product.

Related terms: FLAT, High Salt

CORKY

Definition: The description of a hard, tough, and overly rubbery cheese texture/body characterized by failure of the cheese to break down when worked between the thumb and fingers. Corky is a more extreme, drier characteristic than curdy.

Reference Point: Wine cork, rubber stopper

Styles where it occurs: Cheddars and other aged cheeses

Defect: If the body is very tough and dry, corky can be quite objectionable.

Possible cause: Dehydration, lack of acid development, salt too high, too much CaCl₂, not enough coagulant, overcooking

Synonyms: Tough, Woody

Related terms: CURDY, Dry, GRAINY, Hard, MEALY, TEXTURE

CRUMBLY

Definition: Describes the texture of a cheese body that breaks during plugging and/or falls apart upon working between thumb and fingers.

Reference point: Queso fresco or feta cheese

The image below exhibits crumbly body that is not expected in an aged cheese.



Styles where it occurs: Many styles of cheese, potentially butter

Attribute/Defect: Considered an attribute in some applications and to some cultures (Queso fresco, feta); considered a defect if extreme and in most cheese applications.

Possible Cause: Body of cheese is not knit together well because of low moisture, excessive salt, low or high acid production, low proteolysis.

Synonym: Friable

Related terms: GRAINY, MEALY, SHORT, TEXTURE CRYSTALS See CALCIUM LACTATE, TYROSINE CRYSTALS

CURDY

Definition: Describes the texture/body of a cheese that is firm and slightly resistant to compression if worked between the fingers. It is rubbery, not waxy, and is somewhat resistant to working into a smooth ball. Small curd particles are evident in worked ball.

Reference point: Very young Cheddar or Monterey Jack

Styles where it occurs: Cheddars, Jacks

Attribute/Defect: While expected to some extent in young Cheddar, it is considered a defect if extreme **Possible causes:** Either the cheese is very young, or there have been issues in aging/ripening (lack of proteolysis).

Related terms: CORKY, MEALY, TEXTURE

DRY CURD

Definition: Curd which has dried and / or become discolored due to exposure to air or heat prior to pressing, causing an obvious texture or color difference in the paste of the cheese. **Styles where it occurs:** Possible in any natural cheese. **Attribute/Defect:** Visually and texturally, it would always be considered a defect. **Related terms:** CURDY, CRUMBLY, CORKY.

DRY TEXTURE

Definition: Low moisture or low-fat cheese usually associated with dry mouthfeel or crumbly or excessively hard texture.
Styles where it occurs: Can occur in any natural cheese with very low moisture, but most common in reduced or low-fat varieties.
Attribute/Defect: Texturally a defect.
Related terms: Woody, CORKY, DRY CURD.

ELASTIC/ELASTICITY

Definition: Elasticity is a term used to describe the friability of a cheese's texture. This is measured by the way the cheese reacts under pressure. During an evaluation, the manner in which a cheese bends and breaks is assessed, and the texture is described and given descriptive language that places it on the spectrum from short, dry and crumbly, to supple and elastic in texture (desirable) or even weak/pasty (to the other extreme).

Styles where it occurs: Hard cheeses

Attribute/Defect: It is expected that Swiss styles, Alpine styles, Cheddars, and hard cheeses have some level of elasticity.

Synonyms: Flexible, Supple

Related terms: PASTY, SHORT, TEXTURE, WEAK

FINES

Definition: Small bits of curd which have been broken off and were not effectively knit back to the main mass of cheese.

Styles where it occurs: Possible in pressed or gravity knit natural cheeses. **Attribute/Defect:** Unless a variety is expected to have very curdy paste (Queso fresco, Cotija)

fines would be considered a defect.

Related terms: CURDY, CRUMBLY, SHATTERED CURD.

FIRM

Definition: In a renneted or lactic cheese, texture or body that resists pressure when kneaded between thumb and fingers.

Styles where it occurs: Most semi-hard or hard renneted cheeses.

Attribute/Defect: Considered an attribute.

Possible cause: Proper process, composition, and process result in desired firm body. **Related terms:** Solid, not soft, not weak.

FOREIGN

Definition: The term foreign may refer to a flavor that is not expected in a dairy product, or foreign matter (an unexpected ingredient or object).

Reference Point: Hair, insect, herbs, metal fragment, etc.

Styles where it occurs: All fermented dairy products

Attribute/Defect: Foreign flavors may not always be considered objectionable, if interesting. However, foreign matter is considered an adulterant (undeclared ingredients), so it is always a defect.

Possible causes: Foreign flavors can result from non-starter bacteria. Foreign matter results from contamination and lack of quality control.

Related terms: ATYPICAL, Chemical, MEDICINAL, METALLIC

GRAINY

Definition: A textural defect where particles remain intact during chewing or when cheese is kneaded between thumb and fingers.

Reference Point: Smaller particles than mealy, curdy, or corky.

Styles where it occurs: May appear in all cheese varieties and yogurt.
Attribute/Defect: Considered a technical defect.
Possible causes: Improper acid development, breaking yogurt at too high pH.
Related terms: Mealy, gritty, sandy.

GREASY

Definition: This term is used in the evaluation of texture or body of butter or cheese. *In butter:* This is extreme smoothness and immediate melting and a slippery, oil-like texture and mouthfeel. *In cheese:* This is evident from an oily sheen to the appearance on the surface of the cheese, as well as a having a slick, fatty, and coating mouthfeel. Cheeses with this defect are often also seamy.

Reference Point: Indicated by free butterfat between particles of curd.

Styles where it occurs: Butters, Cheddars, Swiss styles

Defect: Greasy is almost always considered a defect.

Possible cause: Curd not fused properly. In butter, this indicates that the granules were over-worked, and is more prevalent in butter produced during the summer.

Related terms: SEAMY

GUMMY

Definition: An excessively sticky or tacky feel to cheese when kneaded between thumb and fingers.

Styles where it occurs: Can occur in any natural cheese. Attribute/Defect: Normally a defect. Synonym: SOFT, sticky, tacky. Related terms: WEAK, PASTY, BROKEN DOWN.

LOOSE KNIT

Definition: A poorly knit or pressed cheese which breaks apart easily under minimal pressure. **Styles where it occurs:** Any natural cheese whether pressed or gravity knit. **Attribute/Defect:** A defect. **Synonym:** CRUMBLY. **Related terms:** CURDY, CORKY, CRUMBLY.

LUMPY Definition: Yogurt does not appear smooth, even after blending with a spoon.

Reference Point:



Styles where it occurs: Yogurt Attribute/Defect: Lumpy is not always objectionable, unless very firm (gel-like). Possible cause: Overstabilization, high pasteurization temperature Synonyms: MATTED, TOO FIRM Related terms: Gel-like TEXTURE

MEALY

Definition: A textural defect where cheese particles remain intact during chewing, where curd does not knit well, and feels like corn meal when rubbed between thumb and fingers.
Reference point: Larger particles than grainy, curdy, or corky. Cornmeal size particles.
Styles where it occurs: May appear in all cheese varieties.
Attribute/Defect: Considered a technical defect.
Possible cause(s): Lack of proper curd knit, improper acid development.
Synonym: Short texture.
Related terms: Grainy, gritty, sandy.

MOUTHFEEL

Definition: The way the cheese breaks down while chewing it, and the way we experience the chemical effects in the mouth and throat.

Reference point: Skim milk versus whole milk, black tea, wasabi

Styles where it occurs: All fermented dairy products

Related terms: AROMA, Astringency, GRAINY, MEALY, PASTY, Puckering, OVERSTABILIZED, Smooth, TEXTURE, Volatiles

OVERSTABILIZED

Definition: Cottage cheese: the curds feel slick or slimy when pressed with the tongue on the roof of the mouth. Yogurt: tends to be too FIRM.

Reference point: Petroleum jelly on lips

Styles where it occurs: Cottage cheese, yogurt

Defect: Overstabilized is almost always considered a defect.

Possible cause: Overuse of, or poor selection of, stabilizer.

Related terms: FIRM, MOUTHFEEL, Slick, Slimy

PASTY

Definition: The texture of a cheese body breaks down readily, seems wet, and sticks to thumb and fingers while working.

Reference point: Wet dough, cream cheese, chevre

Styles where it occurs: Can occur in nearly all styles, though commonly used in grading Cheddar/hard cheeses, or in softer unripened styles like cottage cheese.

Attribute/Defect: Some level of pasty body is to be expected in chevre and cream cheese. But generally, pasty is considered a defect.

Possible cause: High moisture in curd, high moisture in cheese, high acid, low salt **Synonym:** Sticky

Related term: ELASTIC/ELASTICITY, MOUTHFEEL, Soft, TEXTURE, WEAK, Wet

PIN HOLES

Definition: A cheese that displays the presence of many very small gas holes (pin holes).
Reference Point: Small holes that can be so numerous cheese paste can appear sponge like.
Styles where it occurs:
Attribute/Defect: Defect. Indicates potential presence of unwanted gas formers.
Possible causes: Low quality milk, poor sanitation, post pasteurization contamination with coliforms or similar.
Synonym: SWEET HOLES.

Related terms: GASSY, Pinny, OPEN.

ROPY

Definition: When stirred, and a spoon is lifted up out of yogurt, a viscous string of yogurt follows the spoon. The yogurt feels viscous in the mouth.

Reference Point:



Styles where it occurs: Yogurt

Attribute/Defect: Ropy is not necessarily a defect unless overly slick and slimy. Ropy cultures (certain strains of Lactococcus lactis, etc.) are often used in natural yogurt, instead of stabilizers, to provide body to the product.

Possible causes: Ropy cultures or overstabilization Related terms: Stringy, slick, slimy

RUBBERY see **FIRM**

RUNNY

Definition: Cheese which has broken down to the point that the paste has become nearly liquid. Styles where it occurs: Possible in any cheese.

Attribute/Defect: An attribute and expected in the normal curing of some surface ripened varieties. A defect in most hard or semi-hard cheeses usually indicating the cheese is past its best age. Related terms: WEAK, BROKEN DOWN.

SHORT

Definition: The texture and body of a cheese lacks typical elasticity. Cheese sample takes a "short" time to break and may be tough to remove from cheese body without breaking.

Reference point: Dry, aged Cheddar

Styles where it occurs: Typically used to describe texture in aged cheese.

Attribute/Defect: Short is not generally objectionable, and may only be noted if pronounced, or if uncharacteristic for the given product.

Possible cause: Excess acid production; dehydration

Related terms: CRUMBLY, Dry, ELASTIC/ELASTICITY, TEXTURE, WEAK

SOFT See WEAK

SPREADABLE – SPREADABILITY

Definition: Cheese that has a soft or loose enough texture to allow being spread with little pressure.

Styles where it occurs: Cold-pack or Club cheese, aged surface ripened cheese, Chevre, Fromage Blanc.

Attribute/Defect: Attribute in styles where expected. Related terms: SOFT texture, pliable.

TEXTURE

Definition: A general term used to describe tactile characteristics of cheese, as well as the structure and composition of the cheese's body. This can be evaluated visually, or by the mouthfeel, or by how it slices,

breaks, and cooks. Comments about texture usually include lots of adjectives and descriptive language to communicate its density, moisture level, and friability.

Styles where it occurs: All fermented dairy products

Attribute/Defect: Texture is an important attribute, and defects are related to the style of dairy product. **Possible cause:** The texture of a cheese is related to its acidity and proteolysis.

Related terms: Appearance (smooth, rough, OPEN, etc.), CREAMY, CORKY, CURDY, Density (soft, WEAK, firm, hard, etc.), ELASTIC/ELASTICITY, FIRM/TOO FIRM, Friability (CRUMBLY, elastic, etc.), LUMPY, MEALY, Moisture (dry, wet, free, etc.), MOUTHFEEL, PASTY, SHORT, WAXY

TRANSLUCENT

Definition: Cheese that has the look of being partially transparent.

Reference Point: The edge of a plug will look like the edge of an uncolored wax candle, nearly transparent.

Styles where it occurs: Most easily observed in sample of colored cheddar or similar style of a pressed cheese that has been pulled with a trier.

Attribute/Defect: Attribute as it indicates a well-made, well-pressed, properly aged cheese.

WAXY

Definition: This term refers to the texture and body of a cheese. When the cheese is worked between the fingers, it molds and forms easily, like wax or even cold butter.

Reference point: Candle wax

Styles where it occurs: Swiss styles, hard styles

Related terms: Body, Smooth, TEXTURE

WEAK

Definition: Refers to 1) yogurt that lacks body, or 2) cheese that does not require much pressure to cause the cheese to become misshapen. This describes the texture, body, and structure of the cheese. A weak cheese may cause the plug to collapse while removing.

Reference point: Cream cheese, marshmallows, light yogurt

Attribute/Defect: Weak is considered a defect when it pronounced or is not typical of the style. *In yogurt*: Product does not stand up in the spoon, and/or may appear watery. *In cheese*: The cheese curd does not hold up when worked between the thumb and fingers. Soft curd may possibly be wet.

Possible causes: *In yogurt*: under-stabilization, low casein or low total milk solids, under incubation, or low pasteurization temperature. *In cheese*: Too much whey in cheese, excess acid, excess fat, low salt, excess proteolysis.

Synonym: Soft

Related terms: Body, CREAMY, PASTY, Rind Rot, SHORT, TEXTURE

WOODY

Definition: Cheese body resists pressure and does not break down when chewed or kneaded between the thumb and fingers. **Reference Point:**

Styles where it occurs: Reduced fat, low fat, over pasteurized, or excessively low moisture cheeses. **Attribute/Defect:** Defect.

Synonym: Dry, COARSE.

Related terms: DRY TEXTURE, CURDY.

LIST OF TERMS IN THE ACS LEXICON & GLOSSARY

A ACETALDEHYDE ACID AFTERTASTE *(See FINISH)* AIR HOLES (STEAM HOLES) AMMONIA/AMMONIATED ANIMAL APPEARANCE AROMA ASTRINGENT ATYPICAL

в

BALANCED BARNY/BARNYARD BELLIED BITTER BLEACHED SURFACE BLIND BLEACHED/BLEACHING BLOW HOLE BLOWN BROKEN DOWN BROKEN DOWN BROTHY BURST BANDAGE BUTTERMILK BUTTERY

С

CABBAGE CALCIUM LACTATE CARAMEL CHALKY CHALKY EYES CHECKED RIND CHECKS CHECKS/CHECKED (See CRACKED. SLITS) CHEESY CHEMICAL (See MEDICINAL) CITRUS CLOSED COARSE COLLAPSED COLOR COLORED SPOTS COLOR LEACHING CONDIMENT DISTRIBUTION COOKED CORKY CRACKED RIND/SURFACE CRACKS CREAMY (See BUTTERY) CROOKED (See UNEVEN) CRUMBLY CRYSTALS (See CALCIUM LACTATE, TYROSINE CRYSTALS) CURDY

DEAD EYES

DEFECTIVE COATING DIACETYL DRY CURD DULL **DULL EYES** Е EARTHY ELASTIC/ELASTICITY EYES F FADED FEED FERMENTED FINES FINISH FIRM/TOO FIRM FLAT/LACKS FLAVOR **FLAVOR FLORAL** FOREIGN FREE CREAM FREE MOISTURE/FREE WHEY FRESH(NESS)

G

GASSY GRAINY (See MEALY) GRASS - GRASSY GREASY GUMMY

FROG MOUTH

FRUITY

н

Т

L

HEAT HEATED HERBAL HIGH EDGE HISTAMINE BURN or HISTAMINE REACTION HUFFED

IMMATURE MOLD IRREGULAR BANDAGE IRREGULAR EYES ITCHY

LACTIC LIPASE (See RANCID) LOOSE KNIT LOOSE SEAL LOOSE WRAP LOPSIDED LUMPY

Μ

MALTY MATTED MEALY MEATY MEDICINAL METALLIC MITES MOLD ON SURFACE MOLD UNDER BANDAGE MOLD UNDER WRAPPER MOLDY MOTTLED MOUTHFEEL MUSTY (See MOLDY) MUSHROOM(Y)

Ν

NESTY NUTSHELL NUTTY

0

OLD CREAM/OLD MILK OLD INGREDIENT ONE SIDED ONION OPEN OVERDEVELOPED RIND OVERSET OVERSTABILIZED OXIDIZED

Ρ

PACKAGING OVERLAP PASTY PICKS PIN HOLES PINKING PINK RING PRESENTATION (See APPEARANCE)

R

RANCID RIND ODOR RIND ROT RIPE ROPY ROUGH EYES ROUGH SURFACE ROUNDED CORNERS/EDGES RUBBERY (*See FIRM*) RUNNY

S

SALT(Y) SANITIZER SCORCHED SEAMY SHARP SHATTERED CURD SHELL EYES SHORT SHRUNKEN

SLIMY SLIPPED COAT SLITS SMOKEY/SMOKY SOFT (See WEAK) SOFT SPOTS SOILED SURFACE SOUR SOUR RIND SPECKS/SPOTS SPLITS SPREADABLE-SPREADABILITY STALE STORAGE STREUBLE SULFIDE SURFACE DEFECTS SURFACE MOLD SURFACE ODOR SWEET

SWEET HOLES SYNERESIS (See FREE) MOISTURE/FREE WHEY

T TART TEXTURE TOASTED TRANSLUCENT TYROSINE CRYSTALS

U UMAMI UNCLEAN UNDERDEVELOPED RIND UNDERSET UNEVEN UNEXPECTED SURFACE GROWTH UNIFORM UNNATURAL UTENSIL

V VEGETAL VOLATILES

W

WAVY WAXY WEAK WEAK RIND WEEDY WET RIND WET SURFACE WHEY/WHEY TAINT WOODY

Y YEAST(Y)

APPENDIX A: QUICK REFERENCE GUIDE

ACETALDEHYDE Synonyms: Green apple Related terms: ATYPICAL, Harsh, SHARP

ACID Synonyms: SOUR Related terms: ATYPICAL, Bright, CHEESY, Citrus, LACTIC, SHARP, Tangy, Tart

AFTERTASTE see FINISH

AIR HOLES (STEAM HOLES)

AMMONIA/AMMONIATED Synonyms: Catty Related terms: Over Ripe, RIPE

ANIMAL Synonyms: Cowy, Goaty, Sheepy Related terms: BARNY, UNCLEAN

APPEARANCE

AROMA Related terms: FLAVOR, MOUTHFEEL, VOLATILES

ASTRINGENT Synonyms: Mouth-drying

ATYPICAL Related terms: ACETALDEHYDE, ACID (High or Low), COLOR, FLAT, FOREIGN, Lacks FLAVOR, SALT, UNDERSET, Unnatural

BALANCED Synonyms: UNIFORM Related terms: EYES, Delicate, Mellow, Smooth, Even BARNY/BARNYARD Synonym: Cowshed, ANIMAL Related terms: ANIMAL, UNCLEAN, funky.

BELLIED Related terms: HUFFED, BLOWN, blowing.

BITTER Related terms: RANCID, UNCLEAN

BLIND Related terms: CLOSED, EYES, UNDERSET

BLEACHED/BLEACHING Related terms: COLOR, COLOR LEACHING, FADED, Streaking

BLEACHED SURFACE Related terms: Light oxidation.

BLIND Related terms: UNDERSET.

BLOW HOLE Synonym: BLOWN.

BLOWN Related terms: CABBAGE, COLLAPSED, GASSY, OVERSET, Lopsided

BROKEN DOWN Related terms: WEAK, SOFT, PASTY, GUMMY, RUNNY.

BROTHY Synonyms: Savory, MEATY, UMAMI Related terms: WHEY

BURST BANDAGE Related terms: Torn Bandage.

BUTTERY Synonyms: Diacetyl Related terms: CREAMY, LACTIC

BUTTERMILK Related terms: BUTTER, BUTTERY notes, DIACETYL.

CABBAGE Related terms: OVERSET, COLLAPSED eyes, STREUBLE.

CALCIUM LACTATE Related term: CRYSTALS

CARAMEL Related term: COOKED, HEATED, SCORCHED, SWEET

CHALKY Related terms: Gritty, GRAINY, sandy.

CHALKY EYES **Related terms:** DULL EYES, DEAD EYES.

CHECKS/CHECKED Related terms: PICKS, Cracks.

CHECKED RIND Related terms: Split rind, CRACKED RIND, curd openings.

CHEESY Related terms: ACID, OLD CREAM/OLD MILK, SOUR, UNCLEAN

CHEMICAL See **MEDICINAL**

CITRUS Related terms: CITRUS Notes, lemon, lemony.

CLOSED Related terms: BLIND, EYES, OPEN

COARSE Related terms: FLAT, High Salt

COLLAPSED

Related terms: BLOWN, CABBAGE, EYES, FROG MOUTH

COLOR Related terms: ATYPICAL, BLEACHED, Bright, DULL, FADED, PINKING, MOTTLED, OXIDIZED, SEAMY

COLOR LEACHING Related terms: BLEACHED, MOTTLED

COLORED SPOTS Related terms: SPOTS, SPECKS.

CONDIMENT DISTRIBUTION (EXCESS/LACKING INCLUDING SMOKE) Related terms: UNEVEN.

COOKED Synonyms: HEATED Related terms: CARAMEL, NUTTY, SCORCHED, SULFIDE, SWEET

CORKY Synonyms: Tough, Woody Related terms: CURDY, Dry, GRAINY, Hard, MEALY, TEXTURE

CRACKED/CRACKS Related terms: CHECKED, CHECKS, Disturbed, Open rind, Picks, SLITS, Splits

CRACKED RIND – SURFACE CRACKS Synonym: Defective rind. Related terms: Disturbed rind.

CREAMY See BUTTERY, LACTIC, TEXTURE, WEAK

CROOKED See **UNEVEN**

CRUMBLY Synonym: Friable Related terms: GRAINY, MEALY, SHORT, TEXTURE

CRYSTALS See CALCIUM LACTATE, TYROSINE CRYSTALS

CURDY Related terms: CORKY, MEALY, TEXTURE DIACETYL Related terms: BUTTER, BUTTERY notes, BUTTERMILK, butterscotch.

DEAD EYES Related terms: DULL EYES, CHALKY EYES.

DEFECTIVE COATING

DRY CURD Related terms: CURDY, CRUMBLY, CORKY.

DRY TEXTURE Related terms: Woody, CORKY, DRY CURD.

DULL Related terms: COLOR, EYES, FADED, Pale

DULL EYES Related terms: DEAD EYES.

EARTHY

Related terms: FEED, MOLDY, MUSHROOM ELASTIC/ELASTICITY Synonyms: Flexible, Supple Related terms: PASTY, SHORT, TEXTURE, WEAK

EYES

Related terms: BALANCED, BLIND, CABBAGE, CLOSED, COLLAPSED, DULL, FROG MOUTH, GASSY, IRREGULAR EYES, NESTY, ONE SIDED, OVERSET, STREUBLE, SWEET HOLES, UNDERSET, UNIFORM FADED Synonym: UNEVEN color across the body of a cheese. Related terms: Light oxidation.

FEED

Related terms: Alfalfa, EARTHY, Garlic, Grassy, Green, Onion

FERMENTED Related terms: FRUITY, GASSY, SOUR, WHEY/WHEY TAINT, YEASTY

FINES

Related terms: CURDY, CRUMBLY, SHATTERED CURD.

FINISH Related terms: AFTERTASTE, FLAVOR

FIRM Related terms: Solid, not SOFT, not WEAK.

FLAT/LACKS FLAVOR Related terms: ATYPICAL, COURSE

FLAVOR: Related terms: AROMA, ATYPICAL, Excess, FINISH, Unbalanced, VOLATILES

FOREIGN Related terms: ATYPICAL, Chemical, MEDICINAL, METALLIC

FREE CREAM Related terms: FREE WHEY

FREE MOISTURE Synonyms: Syneresis Related terms: FREE CREAM, SHRUNKEN, Weeping, Weepy

FREE WHEY **Related terms:** Weeping, wet, FREE MOISTURE.

FRESH(NESS) – Fresh dairy, fresh milk, fresh cream Related terms: Fresh dairy, fresh milk, fresh cream.

FLORAL **Related terms:** Aromatic, SWEET, HERBAL.

FROG MOUTH Related terms: COLLAPSED, EYES, IRREGULAR EYES, OPEN

FRUITY

Related terms: FERMENTED, Green, VOLATILES, WHEY/WHEY TAINT, YEASTY

GASSY

Synonym: OVERSET, Pin holes, SLITS, SWEET HOLES Related terms: BLOWN, Bloated, EYES, FERMENTED, Huffed, YEASTY

GRAINY Related terms: MEALY, gritty, sandy.

GRASS – GRASSY Synonym: VEGETAL. Related terms: HERBAL, WEEDY, UNCLEAN, FEED.

GREASY Related terms: SEAMY

GUMMY Synonym: SOFT, sticky, tacky. Related terms: WEAK, PASTY, BROKEN DOWN.

HEAT Synonyms: Burn, Itchy, Prickly, Spicy, Tingly

HEATED Synonyms: COOKED **Related terms:** CARAMEL, SCORCHED, VOLATILES

HERBAL **Related terms:** ONION, FEED, GRASS, GRASSY.

HIGH EDGE

HISTAMINE BURN or HISTAMINE REACTION Related terms: Tingly, prickly, HEAT, ITCHY, Parm rash.

HUFFED Related terms: GASSY, BLOWN, blowing.

IMMATURE MOLD Related terms: Unripe

IRREGULAR BANDAGE Related terms: BURST BANDAGE, torn bandage.

IRREGULAR EYES Related terms: EYES, FROG MOUTH, Misshapen eyes, NESTY, SWEET HOLES ITCHY Related terms: Burn, Prickly, HEAT

LACTIC Related terms: ACID, Buttermilk, BUTTERY, CREAMY, Milk Fat, Milky, SOUR

LIPASE See RANCID

LOOSE KNIT Synonym: CRUMBLY. Related terms: CURDY, CORKY, CRUMBLY.

LOOSE SEAL Related terms: Leaker, Leaky seal.

LOOSE WRAP

LOPSIDED

LUMPY Synonyms: MATTED, TOO FIRM Related terms: Gel-like TEXTURE

MALTY Related terms: SWEET

MATTED Synonyms: Clumped, LUMPY

MEALY Synonym: SHORT texture, Related terms: GRAINY, gritty, sandy.

MEATY Synonyms: BROTHY, Savory, UMAMI

MEDICINAL Related terms: CHEMICAL, FOREIGN, METALLIC

METALLIC Synonym: Copper, FOREIGN, Iron, MEDICINAL, "Tin Can" Flavor MITES Synonym: Mite-damaged, Mitey

MOLD, IMMATURE see IMMATURE MOLD

MOLD ON SURFACE Related terms: SURFACE MOLD.

MOLD UNDER BANDAGE

MOLD UNDER WRAPPER Related terms: MOLDY, SURFACE MOLD, mold under packaging.

MOLDY Related terms: EARTHY, MUSTY MOTTLED

Synonym: UNEVEN color across the body of a cheese. Related terms: UNEVEN coloring, wavy, COLOR LEACHING.

MOUTHFEEL

Related terms: AROMA, Astringency, GRAINY, MEALY, PASTY, Puckering, OVERSTABILIZED, Smooth, TEXTURE, Volatiles

MUSTY See MOLDY

MUSHROOM(Y) Related terms: EARTHY NESTY Related terms: EYES, IRREGULAR EYES, ONE SIDED, STREUBLE

NUTSHELL Related terms: DEAD EYES, DULL EYES, IRREGULAR EYES.

NUTTY Related terms: TOASTED, COOKED.

OLD CREAM/OLD MILK Related terms: CHEESY, OLD INGREDIENT, Stale, STORAGE, UNCLEAN

OLD INGREDIENT Related terms: OLD CREAM/OLD MILK, Stale, STORAGE, UNCLEAN

ONE SIDED Synonym: UNEVEN Related terms: EYES, NESTY, STREUBLE, UNDERSET, UNIFORM

ONION Related terms: FEED, WEEDY.

OPEN Related terms: CHECKED, CLOSED, CRACKED, FROG MOUTH, Loose knit OVERDEVELOPED RIND Synonym: Overdeveloped mold. Related terms: Excessive rind.

OVERSET Synonym: GASSY Related terms: BLOWN, EYES, CABBAGE, UNDERSET

OVERSTABILIZED Related terms: FIRM, MOUTHFEEL, Slick, Slimy

OXIDIZED Synonym: PINKING Related terms: COLOR, FADED

PACKAGING OVERLAP

PASTY Synonym: Sticky **Related term:** ELASTIC/ELASTICITY, MOUTHFEEL. Soft. TEXTURE. WEAK. Wet

PICKS Related terms: CHECKS, Cracks

PIN HOLES Synonym: SWEET HOLES. Related terms: GASSY, Pinny, OPEN.

PINKING Synonym: OXIDIZED Related terms: COLOR, FADED

PINK RING

PRESENTATION See APPEARANCE

RANCID Synonym: LIPASE. Related terms: baby vomit, soapy, UNCLEAN.

RIND ODOR

Related terms: RIND ROT.

RIND ROT Related terms: RIND ODOR, WEAK RIND, WET RIND.

RIPE Related terms: A point, AMMONIA/AMMONIATED, Over ripe, Under ripe

ROPY Related terms: Stringy, slick, slimy

ROUGH EYES Related terms: SHELL EYES, NUTSHELL. **ROUGH SURFACE** Related terms: Poor finish.

ROUNDED CORNERS/EDGES

RUBBERY see FIRM

RUNNY Related terms: WEAK, BROKEN DOWN.

SALT(Y)

SANITIZER Related terms: UTENSIL, CHEMICAL, UNNATURAL. SCORCHED **Related terms:** CARAMEL, Caramelized, COOKED. SWEET

SEAMY Related terms: UNEVEN color.

SHARP Related terms: ACETALDEHYDE, ACID, Piquant, SOUR, SULFIDE

SHATTERED CURD Related terms: Non-uniform

SHELL EYES Related terms: Rough, NUTSHELL.

SHORT Related terms: CRUMBLY, Dry, ELASTIC/ELASTICITY, TEXTURE, WEAK

SHRUNKEN Related terms: FREE WHEY

SLIMY Related terms: WET RIND.

SLIP COAT Related terms: Peau de Grenouille, Slip skin, Slip rind

SLITS Synonym: Late gas. Related terms: PICKS, CHECKS, SPLITS, CRACKS, fisheyes.

SMOKEY/SMOKY

SOFT See WEAK

SOUR Synonym: ACID Related terms: CHEESY, FERMENTED, LACTIC, SHARP

SOUR RIND Related terms: RIND ODOR, SOFT SPOTS.

SOFT SPOTS Related terms: RIND ROT.

SOILED SURFACE

SPECKS/SPOTS (BROWN/WHITE) Related terms: COLORED SPOTS.

SPLITS Related terms: PICKS, CHECKS, Cracks.

SPREADABLE – SPREADABILITY

Related terms: SOFT texture, pliable.

STALE Synonym: Lacking freshness, old milk. **Related terms:** FLAT, MUSTY, bland, OXIDIZED.

STORAGE Related terms: Lacks freshness, OLD CREAM/OLD MILK, OLD INGREDIENT, Stale STREUBLE Related terms: CABBAGE, EYES, NESTY, ONE SIDED

SULFIDE Related terms: COOKED, SHARP, Skunky, Sulfur

SWEET Related terms: CARAMEL, COOKED, MALTY, NUTTY, SCORCHED

SWEET HOLES Related terms: EYES, IRREGULAR EYES, OVERSET, Pinny, Small eyes

SURFACE DEFECTS Related terms: UNDERDEVELOPED RIND, inadequate SURFACE MOLD growth, excess rind.

SURFACE MOLD Related terms: MOLD UNDER WRAPPER, MOLD UNDER BANDAGE.

SURFACE ODOR Related terms: RIND ODOR, RIND ROT.

SYNERESIS see FREE MOISTURE/ FREE WHEY

TART Related terms: ACID, SHARP, SOUR.

TEXTURE Related terms: Appearance (smooth, rough, OPEN, etc.), CREAMY, CORKY, CURDY, Density (soft, WEAK, firm, hard, etc.), ELASTIC/ELASTICITY, FIRM/TOO FIRM, Friability (CRUMBLY, elastic, etc.), LUMPY, MEALY, Moisture (dry, wet, free, etc.), MOUTHFEEL, PASTY, SHORT, WAXY

TOASTED

Related terms: CARAMEL, caramelized, NUTTY, slightly COOKED.

TRANSLUCENT

TYROSINE CRYSTALS

Related terms: CALCIUM LACTATE is often confused for tyrosine crystals, but tyrosine is only present in aged cheeses.

UMAMI

Synonym: BROTHY, MEATY Related terms: Protein, Savory UNDERSET Related terms: ATYPICAL, BLIND, EYES, OVERSET, UNEVEN, UNIFORM

UNCLEAN

Related terms: Aftertaste, ANIMAL, BARNY, BITTER, CHEESY, Complex, Dirty, Finish, OLD CREAM/OLD MILK, OLD INGREDIENT, Putrid, RANCID, WHEY/WHEY TAINT

UNEVEN

Synonym: ONE SIDED Related terms: COOKED, CROOKED, EYES, Lopsided, Nonhomogeneous, UNDERSET, UNIFORM

UNDERDEVELOPED RIND Synonym: Underdeveloped mold. **Related terms:** IMMATURE MOLD, inadequate mold.

UNEXPECTED SURFACE GROWTH

Synonym: MOLD ON SURFACE, SURFACE MOLD. Related terms: Mold under wrap, mold under wax, MOLD UNDER BANDAGE.

UNIFORM

Synonym: BALANCED Related terms: CROOKED, EYES, Lopsided, ONE SIDED, UNEVEN, Uniform, UNDERSET

UNNATURAL

Related terms: FADED, MOTTLED, BLEACHED, wavy.

UTENSIL Synonym: UNCLEAN. Related terms: SANITIZER, CHEMICAL.

VEGETAL

Related terms: GRASSY, WEEDY, HERBAL, FLORAL.

VOLATILES

Related terms: AROMA, FLAVOR, Fragrance, FRUITY, Retronasal, Volatile Aromas

WAVY

Related terms: MOTTLED, UNNATURAL.

WAXY

Related terms: Body, Smooth, TEXTURE

WEAK

Synonym: Soft **Related terms:** Body, CREAMY, PASTY, Rind Rot, SHORT, TEXTURE

WEAK RIND **Related terms:** SOFT rind, SOFT SPOTS.

WEEDY

Related terms: ONION, FEED, GRASS, GRASSY.

WET RIND

Related terms: FREE MOISTURE, surface moisture.

WET SURFACE Related terms: WET RIND, FREE MOISTURE.

WHEY/WHEY TAINT

Synonym: Whey stain **Related terms**: BROTHY, FERMENTED, FRUITY, UNCLEAN

WOODY

Synonym: Dry, COARSE. Related terms: DRY TEXTURE, CURDY.

YEAST(Y)

Related terms: FERMENTED, FRUITY, GASSY

APPENDIX B: ADJECTIVES COMMONLY USED IN EVALUATION

Appealing Approachable Artisan Attractive Balanced Classic Clean Complex Desirable Delicate Enjoyable Even Interesting Intriguing Long Nice Nuanced Pastoral Piquant Pleasant Pleasing Rustic Satisfying Smooth Spicy Traditional Symmetrical Uniform

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