



# Table of pediatric medical conditions and findings named after foods

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## Abstract

This is a companion appendix to a published peer-reviewed article.<sup>[1]</sup> Included in the table are medical terms that have analogies related to food and drink (and also related to items involved in the preparation or consumption of food and drink).

Analogy	Brief description
Blueberry muffin baby/rash/syndrome	Blue <b>purpura</b> , <b>petechiae</b> or other skin findings akin to blueberries on a muffin, caused by cutaneous <b>extramedullary hematopoiesis</b> secondary to <b>congenital infections</b> , certain <b>cancers</b> or <b>hematologic abnormalities</b> . <sup>[2]</sup>
Bread and butter appearance	Layers of <b>pericardium</b> resembling bread and intervening <b>fibrin</b> resembling butter, found in cases of <b>fibrinous pericarditis</b> and sometimes <b>rheumatic fever</b> . <sup>[3]</sup>
Cabbage-like odor, Rancid butter odor <sup>1</sup>	Urinary odor like that of cabbages due to an increase in urinary <b>2-hydroxybutyric acid</b> in <b>fumarylacetoacetate hydrolase</b> , also known as <b>tyrosinemia type 1</b> ; also associated with <b>methionine</b> malabsorption (see Oasthouse syndrome in this table); body odor of rancid butter caused by an increased production of 2-oxo-4-methylbutyric acid in <b>tyrosinemia type 1</b> . <sup>[4]</sup>
Carrot-shaped nuclei	Carrot-like <b>microscopic</b> appearance of <b>nuclei</b> in <b>medulloblastoma</b> , the most common <b>malignant childhood brain tumor</b> . <sup>[5]</sup>
Celery stalk appearance	Alternating bands of <b>lucent</b> and <b>sclerotic metaphyseal bone</b> of the <b>femur</b> and <b>tibia</b> on <b>X-ray</b> , causing these bones to appear like celery stalks, seen in patients with <b>congenital rubella</b> and other conditions. <sup>[6]</sup>
Cheesy odor <sup>1</sup>	Breath and <b>body fluids</b> odor caused by an accumulation of <b>isovaleric acid</b> in children with <b>isovaleric acidemia</b> , due to the deficiency of <b>isovaleryl-CoA dehydrogenase</b> . <sup>[7]</sup>
Cherry red epiglottis	Red, swollen <b>epiglottis</b> and adjacent tissues resembling a red cherry upon visualization by <b>laryngoscopy</b> , secondary to <b>Haemophilus influenzae type b</b> and other <b>bacterial infections</b> . <sup>[8]</sup>
Cherry-red spot <sup>1</sup>	Red, cherry-like appearance of the vascular <b>choroid</b> under the <b>macula</b> on an otherwise <b>lipid-laden</b> , whitened retina, seen on <b>fundoscopic</b> exam in disorders of lipid metabolism such as <b>Tay-Sachs disease</b> , <b>Sandhoff's disease</b> and <b>Sialidosis</b> ; can also be seen with other eye disorders including <b>central retinal artery occlusion</b> . <sup>[9]</sup>
Cottage-loaf sign	Chest X-ray appearance similar to a cottage loaf in patients with <b>total anomalous pulmonary venous connection/drainage/return</b> ; also known as the 'snow man' sign or 'figure of 8' sign. <sup>[10]</sup>

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Cracked-pot sign	Sound obtained upon <b>percussing</b> the head of an <b>infant</b> affected by <b>hydrocephalus</b> , similar to the sound obtained when striking a cracked pot. <sup>[11]</sup>
Dish-face anomaly	<b>Congenital</b> midface <b>hypoplasia</b> resulting in flattened, dish-like features, seen in <b>Larsen syndrome</b> , <sup>[12]</sup> and in <b>Binder syndrome</b> (maxillonasal dysplasia). <sup>[13]</sup>
Doughnut sign, Sandwich sign	Doughnut shape created by the <b>hyperechoic</b> central core of <b>bowel</b> and <b>mesentery</b> surrounded by the <b>hypoechoic</b> outer <b>edematous</b> bowel, seen on <b>transversesonography</b> or <b>computed tomography</b> in <b>intussusception</b> , also known as the target sign; on <b>longitudinal</b> imaging intussusception resembles a sandwich. <sup>[14]</sup>
Egg on a string sign	Cardio- <b>mediastinal</b> silhouette in which the <b>enlarged heart</b> represents an egg on its side and the narrowed, <b>atrophic thymus</b> of the superior mediastinum represents the string, seen on chest X-ray in <b>transposition of the great arteries/vessels</b> . <sup>[15]</sup>
Fish odor syndrome <sup>1</sup>	Body odor of rotten fish secondary to an accumulation of <b>trimethylamine</b> in <b>flavin-containing monooxygenase 2</b> deficiency. <sup>[16]</sup>
Honey-colored crusts	Description of the crusts the color of honey overlying healing <b>blisters</b> in cases of <b>impetigo</b> , a superficial skin infection caused by <b>Staphylococcus aureus</b> or <b>Streptococcus pyogenes</b> . <sup>[17]</sup>
Hot cross bun head/skull	Rare <b>radiographic</b> manifestation in which the skull resembles a hot cross bun due to abnormal bone deposition in the <b>frontal</b> and <b>parietal</b> regions in <b>congenital syphilis</b> . <sup>[18]</sup>
Ice cream sliding off the cone	<b>Hip X-ray</b> appearance in <b>slipped capital femoral epiphysis</b> in which the separation of the <b>epiphysis</b> from the rest of the femur appears similar to ice cream sliding off the cone. <sup>[19]</sup>
Maple syrup urine disease <sup>1</sup>	Caramel-like urinary odor similar to the smell of maple syrup caused by the accumulation of <b>sotolone</b> (4,5-dimethyl-3-hydroxy-2[5H]-furanone) in individuals with <b>branched-chain alpha-keto acid dehydrogenase complex</b> deficiency. <sup>[20]</sup>
Mulberry molars	Abnormally increased number of cusps in the first <b>permanent molars</b> in congenital syphilis; normal <b>molars</b> have four cusps. <sup>[21]</sup>
Oasthouse syndrome <sup>1</sup>	Urine odor of an oasthouse, a building used for drying hops, caused by the increased conversion of methionine into <b>butyric acid</b> and other compounds in disorders of methionine metabolism. <sup>[22]</sup>
Olive-shaped mass	<b>Palpable abdominal mass</b> the shape of an olive found in infants with <b>hypertrophic pyloric stenosis</b> (HPS); usually found in conjunction with other hallmark HPS features including male preponderance, projectile vomiting with a good appetite, visible <b>peristalsis</b> after feeds and <b>hypochloremic, hypokalemic metabolic alkalosis</b> . <sup>[23]</sup>
Onion skin reaction	<b>Periosteal reaction</b> resulting in the layering of <b>periosteum</b> similar to the layering of onion skin, seen on X-ray in <b>Ewing sarcoma</b> and sometimes in <b>osteomyelitis</b> <b>osteosarcoma</b> . <sup>[24]</sup>
Pancake brain	Resemblance of the <b>brain</b> to a pancake due to the fusion and expansion of the <b>ventricles</b> seen on <b>pathologic</b> and <b>radiographic</b> examination, caused by the failure of the <b>prosencephalon</b> (forebrain) to separate during fetal development in alobar <b>holoprosencephaly</b> . <sup>[25]</sup>
Pea soup stool	Description of <b>meconium</b> , which resembles pea soup in appearance and consistency; <b>typhoid</b> can also cause stool to resemble pea soup. <sup>[26]</sup>
Port-wine stains	Also known as <b>nevus flammeus</b> , birthmarks or skin patches the color of port wine (red, pink, or purple) typically affecting the face and neck, caused by malformed <b>capillaries</b> in syndromes such as <b>Sturge-Weber</b> , linked to <b>somatic mutation</b> in the gene <b>GNAQ</b> (Guanine nucleotide-binding protein G(q) subunit alpha). <sup>[27]</sup>
Potato chip scales	Weeping, crusted <b>scales</b> typically on the face that resemble potato chips in <b>staphylococcal scalded skin syndrome</b> . <sup>[28]</sup>
Prune belly syndrome	Wrinkled abdominal skin similar to the wrinkles of a prune secondary to the absence of <b>abdominal musculature</b> ; also known by various eponyms and characterized by urogenital abnormalities. <sup>[29]</sup>
Red-currant jelly stool	Stool consisting of blood admixed with mucus which resembles <b>red currant jelly</b> and can occur in cases of <b>intussusception</b> , <b>dysentery</b> or other diseases. <sup>[30]</sup>
Rotten eggs odor <sup>1</sup>	Urine odor of rotten eggs due to an increase in sulfur-containing <b>cystine</b> in <b>cystinuria</b> , a cystine reabsorption defect. <sup>[31]</sup>
Salmon patches	<b>Retinal hemorrhage</b> the color of salmon flesh visualized on <b>fundoscopy</b> , one of many manifestations of <b>sickle cell retinopathy</b> ; <sup>[32]</sup> also used to describe the pink-red 'stork bite' of the nape of the neck, the most common vascular malformation in infancy caused by malformed dermal capillaries. <sup>[33]</sup>
Salt grains	Also known as <b>Koplik spots</b> , lesions that resemble grains of white or blue salt splattered on a red <b>buccal mucosa</b> in <b>measles</b> . <sup>[35]</sup>
Salt-pepper retinopathy	Focal areas of increased and decreased pigmentation resembling salt and pepper, seen on <b>fundoscopy</b> in <b>rubella</b> retinopathy, <b>congenital syphilis</b> or other <b>congenital infections</b> . <sup>[34]</sup>
Sausage-shaped mass	<b>Right upper quadrant</b> or <b>epigastric</b> mass that feels like a sausage on abdominal palpation in some patients with intussusception, also visible on computed tomography scan. <sup>[36]</sup>



Strawberry hemangioma	Also known as a <b>capillary hemangioma</b> , a <b>benign</b> red-blue tumor of blood vessels resembling a ripe strawberry which regress by age 10; now recognized to be <b>immunoreactive</b> for <b>GLUT1</b> (erythrocyte-type glucose transporter protein 1). <sup>[37][38]</sup>
Strawberry tongue, Raspberry tongue	Bright red <b>tongue</b> with prominent <b>papillae</b> similar in appearance to a strawberry or raspberry, found in diseases likely mediated by <b>superantigens</b> including <b>toxic shock syndrome</b> (Staphylococcus aureus toxin), <b>scarlet fever</b> (Streptococcus pyogenes toxin) and <b>Kawasaki disease</b> (a type of vasculitis involving medium-sized arteries). <sup>[39][40]</sup>
Sunflower cataracts <sup>1</sup>	Sunflower appearance of the lens of the eye caused by copper deposition in Wilson's disease, a disorder of copper metabolism. <sup>[41]</sup>
Tumbler test aka glass test	Controversial <b>clinical sign</b> elicited when a transparent tumbler is pressed against a <b>skin rash</b> , positive for <b>meningococemia</b> if the rash does not blanch. <sup>[42]</sup>

**Table 1 | 'Cherry picked' food-related medical metaphors in Pediatrics.** Some cutaneous food-related medical terms may not be applicable in those with pigmented skin. <sup>1</sup> The underlying disease is usually inherited in an autosomal recessive manner.

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