

The Four Humors & the Medieval Plate

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Humors

A conversation of medieval health and food theories would be impossible without the Greek and Roman physicians that dominated scientific knowledge all throughout the medieval and renaissance periods.

Hippocrates (approx 450-370 BCE) is hailed as the father of medicine and wrote the Hippocratic Oath. Hippocrates concluded that health was influenced by four humors, or body fluids. These fluids were a combination of cold to hot and moist to dry. Health was a result of a balance of these humors. The liquids consisted of blood, phlegm, black bile, and yellow bile. In the medieval period, Hippocrates was credited with most work in the Hippocratic school of thought, although modern scholars believe that some were written by others in this school. Some Hippocratic writers called these fluids humors. A son in law of Hippocrates wrote a work that linked humors and explained how they can be influenced by diet, but this work is lost, and its existence is only known due to the work being cited by other writers.

A Greek physician named Galen of Pergamum (29-216 CE) was the first to link four temperaments of mankind, humors, and the elements of nature. While Galen took inspiration from his Greek and Roman predecessors and their various schools of thought, he was heavily influenced by Hippocrates. Galen's work and belief system dominated western medical idea well past the renaissance period. The reasons for this dominance are many. He was the personal physician to Roman Emperor Marcus Aurelius, and thus was considered an authority. A great number of his writings survived past his period, and he authored a stunning number of texts- over 400. His works "De alimentorum facultatibus" (On the Properties of Foodstuffs), "De sanitae tuenda" (On the Preservation of Health), and "De probis pravisque alimentorum succis" (on Wholesome and Unwholesome Foods) cover topics ranging from how to use foods, what the ideal diet should be for people of certain temperaments and humors, and general health guidelines. His writings contained a self-superior attitude and were full of accusations of other writers as being fraudulent.

The majority of the following will have its origin in Galenic works and ideas.

A humor is essentially one of these body fluids that regulated all essential aspects of the body. Each humor is associated with various seasons, elements, stages of life, planets, organs, and cardinal directions. Have one out of alignment, and an illness would manifest. Each body fluid had characteristics that shaped them and temperaments they caused. A perfect balance of these fluids was rare and most people were believed to have an excess of a particular humor. This natural imbalance would shape someone's susceptibility to disease and their personality.

Those humors are blood, phlegm, yellow bile, and black bile.

Food as Treatment

The ideas about food and health were dominated by Galenic teachings in the middle ages and renaissance. It was believed that a person could alter their body's humors by controlling what they ate, and a multitude of herbals were published that defined what humors each foodstuff consisted of. Using this humoral system of defining food, one could tailor the diet of a phlegmatic by introducing a diet full of hot, dry foods.

It is the effect of the food item that determines its humoral makeup, and not necessarily physical characteristics. A food that is a liquid, such as the juice of a citrus, could be considered dry because it causes the mouth to pucker, and thus dry the body. Pepper, while not being hot in physical temperature, heats the body due to the richness of its spice. However, it should be noted, that humors of a food often did match its physical characteristics, but the reason for the classification lies with the effect, which so happens to match its physicality. While the classical or medieval dietitian did not possess the scientific insight we do today, they used food's qualities to determine the effect on the body. Color, taste, and how much body waste is produced helped define its effect.

It was also believed that the flesh of meat continued the humors that matched the behavior of that animal. According to Galen, a pig's flesh was the closest to human, was better to eat than other meats. A pig is closer to humans than other food animals due to their similar dietary habits and similar internal structure. The closer the substance was to the human body, the more nutritious it was since you could digest more of it.

Galenic teachings also established a system of degrees of intensity that ranged from one (lowest) to four (highest). A food that is hot in the third degree will heat the body much more than one at the first or second degrees. Foods would be ranked on this scale in both heat and moisture. It should be noted, however, that food doesn't always have an equal degree of moisture and heat. For example, ginger is hot in the third degree but only moist in the first degree. There are, of course, foods that equal in temperature and moisture, such as laurel leaf is both cold and dry in the third degree.

Social class also played a hand in defining what food you should eat, in the form of physical labor. It was usually the case that those of higher social class labored less. Laborers were more active thus their body produces more heat, and higher heat helps digest colder foods. As food was digested very slowly, someone of the leisure class didn't produce enough body heat to burn up such coarse, unrefined food, it would grow putrid in their body before digestion begins. Conversely, refined food would be burned up by a laborer's body before it could take nourishment.

Spices, especially hot ones, were used to aid in digestion. A hot spice (garlic and ginger are included in this) would help with blood flow. As meats were often cold and dense, a hot spice would help negate these effects.



Blood/Sanguine

Hot and Moist

Woodcut from *Deutsche Kalendar*, 1498

Man embracing a woman.

People with an excess of blood have a sanguine (cheerful) temperament. Sanguine people were thought to be boisterous, bubbly, chatty, openly emotional, social extroverts.

Ruddy people are sanguine and have an abundance of blood.

The most abundant fluid that is found in the body.

Element: Air

Season: Spring

Age: Adolescence

Qualities: Hot & Moist

Organ: Heart

Planet: Jupiter

Directions: East

To increase blood eat:

Onions	Parsnips	Lamb
Ginger	Turnips	Quail (in summer)
Olive Oil	Wheat	Veal
Long Pepper	Chickpeas	Chicken

To decrease blood eat:

Mushrooms	Domesticated Cabbage	Beef
Lentils	Oranges	Goat
Millet	Unripe Grapes	Rabbit
Peas	Verjuice	Quail (in winter)



Phlegm

Cold and Moist

Woodcut from *Deutsche Kalendar*, 1498

A couple at leisure.

People with an excess of phlegm are Phlegmatic (languid). Phlegmatic people were thought to be meek, submissive introverts who live to please others.

Phlegmatics will be pale with a waterish, washed out color.

There was a quarter as much phlegm as there was blood.

Element: Water

Season: Autumn

Age: Maturity

Qualities: Cold & Moist

Organ: Brain

Planet: Moon

Direction: North

To increase phlegm eat:

Apples	Chard	New Cheese
Endive	Plums	Pork
Spinach	Lettuce	Egg Whites
Cherries	Melon	Piglet

To decrease phlegm eat:

Garlic	Rue	Hare
Linseed Oil	Fennel	Goat
Mustard	Honey	Peacock
Salt	Wild Cabbage	Crane



Yellow Bile / Cholera

Hot and Dry

Woodcut from *Deutsche Kalendar*, 1498

Man beating a woman

People with an excess of yellow bile have a choleric temperament (quick-tempered, angry). Choleric people were thought to be proud, extroverted, angry people who like to dominate people.

Cholerics are yellowish tinged.

Yellow bile is found in quantities of 1/16 as blood

Element: Fire

Season: Summer

Age: Childhood

Qualities: Hot & Dry

Organ: Gallbladder

Planet: Mars

Direction: South

To increase yellow bile eat:

Garlic	Rue	Hare
Linseed Oil	Fennel	Goat
Mustard	Honey	Peacock
Salt	Wild Cabbage	Crane

To decrease yellow bile eat:

Apples	Chard	New Cheese
Endive	Plums	Pork
Spinach	Lettuce	Egg Whites
Cherries	Melon	Piglet



Black Bile / Melancholy

Cold and Dry

Woodcut from *Deutsche Kalendar*, 1498

An old man resting.

People with an excess of black bile would have a melancholic (sad) temperament. Melancholic people were thought to be emotionally sensitive, perfectionistic introverts.

Melancholics have dark with sunken eyes.

Black bile was present in only tiny amounts, as it was 1/64th as much as blood.

Element: Earth

Season: Winter

Age: Old Age

Qualities: Cold & Dry

Organ: Spleen

Planet: Saturn

Direction: West

To increase black bile eat:

Mushrooms

Lentils

Millet

Peas

Domesticated Cabbage

Oranges

Unripe Grapes

Verjuice

Beef

Goat

Rabbit

Quail (in winter)

To decrease black bile eat:

Onions

Ginger

Olive Oil

Long Pepper

Parsnips

Turnips

Wheat

Chickpeas

Lamb

Quail (in summer)

Veal

Chicken

Recipes

Pork Stew to Counteract Melancholy

1 lb pork shoulder.	10 cloves of garlic
2 cups chicken broth	¼ cup white wine vinegar
1 medium onion	1 tablespoons almond oil
1 medium turnip	1 oz lard
1/2 cup chickpeas (if using dried, soak overnight)	½ cup breadcrumbs (approx)
7 grains of long pepper	Salt to taste

Cube the pork. Chop the onions and turnips. The onions and turnips should be chopped to a medium size ranging to large. Grate the garlic and rehydrated ginger root. Crush the long pepper in a mortar and pestle, making it a fine as possible.

In a cook pot, fry the onions and pork in lard. Cook the onions and pork for about half an hour, until the pork is no longer pink. Add all other ingredients except for the breadcrumbs. On white coals (or medium heat if using a stove), cook for about half an hour stirring from time to time, it should be bubbling, but not boiling over too much. Add this stage add breadcrumbs as necessary to thicken the stew. Add less than you think you may need since they will swell- you can always add more later. Cooking time will vary but I found it to take about an hour and a half in total time while cooking over coals. The stew will be done when the turnips reach your desired consistency.

Spinach and Cheese Tart to Counteract Cholera

1 bunch of spinach	Large pinch saffron
12 oz cheese	½ teaspoon cinnamon
8 oz salt pork	½ teaspoon white pepper
2 oz raisins	¼ teaspoon ginger
3 egg whites	

Mince pork and spinach. Mix cheese, chopped raisins, minced pork, and spices well. Add egg and mix.

Roll out dough very thin for a 9 inch pie pan and cover. Cover pan with dough, add mixture, and cover tart with dough. Trim off edges and pinch to seal.

Cover edges of tart with aluminum foil until the last 15 minutes of cooking.

Cook in a preheated 400 F oven for an hour.

Beef with Mushrooms to Counteract Sanguine

1 lb cubed beef	1 cups lentils
1 lb mushrooms	3 cups water
1 laurel leaf (bay leaf)	Salt
1 tsp red wine vinegar	Pepper

Season beef with salt and pepper. Wash and trim mushrooms, and cut depending on what size you use. Cook beef in a pan with the laurel leaf and vinegar, adding some water as needed. When beef is half done, add the mushrooms. Depending on the cut the of beef you use, you will need to cook from anywhere from 20 minutes to 45. The cheaper the cut, the longer the cook, in general.

In another pan add lentils to hot water and salt and pepper to taste, bring to a boil then turn down and simmer for 15-20 minutes.

Remove laurel leaf from beef, and serve over or next to lentils.

Hare in Gravy to Counteract Phlegm

1 4-pound rabbit, cut into serving pieces	1 tsp powdered galingale
1 cup dry white wine	1/8 tsp each cloves and mace
1 cyos broth, or a combination of the two	Butter for sautéing
2 ½ cups almond milk made with broth and wine	

In a heavy frying pan, melt the butter and sear the meat well on all sides. In a large pot, combine broth and wine and meat. Bring to a boil, reduce heat and simmer, covered, for about half an hour or until meat is cooked through. Remove meat and set aside.

Using the broth in the pot instead of water, make a double batch of almond milk (steep 1.5 cups of ground almonds in broth/wine mixture) . You may want to add more broth or wine to replace what has boiled away while cooking the meat so that you have two cups of liquid. Add the spices and sugar.

In the pot, over medium heat, recombine the meat with the almond milk. Bring to a boil, reduce heat, and simmer, stirring frequently, for about ten minutes.

Humoral Chart

	Dry in the 4th degree	Dry in the 3rd degree	Dry in the 2nd degree	Dry in the 1st degree	Moist in the 1st degree	Moist in the 2nd degree	Moist in the 3rd degree	Moist in the 4th degree
Hot in the 4th degree	celandine, garlic, linseed oil, mustard seed, black pepper, walnut oil							onion
Hot in the 3rd degree		aniseed, bayleaf, old cheese, cinnamon, cloves, garden cress, dill, dittany galingale, hyssop, parsley, dry rocket, sage			fresh rocket, ginger	olive oil, long pepper		
Hot in the 2nd degree	hare		marjoram, rue, fennel	bitter almonds, caraway, cardamom, coriander, crane, watercress, old squab, enula campana, goat kid, honey, horseradish, mace, mastic, mint, mulberry from bushes, nutmeg, peacock, radish, rosemary, wild thyme, white wine	duck, elderflower, fresh walnuts, veal	parsnip, turnip	almond oil, chickpeas, broth, young squab, sweet grapes, grease, lamb, liver, mulberry (from trees), must, mutton, pine nuts, quail in summer, raisin, thrush, lower tripe, turnip greens	
Hot in the 1st degree	white pepper		salt	wild cabbage, chamomile, clary, hazelnut, saffron, cubeb	borage, chicken, wheat starch	chick, egg yolk, ripe olives, pheasant, sweet pomegranate, partridge, wheat		
Cool in the 1st degree			millet, quince, bitter pear, vinegar	cabbage, barley, dried beans, gosling, medlar, oats, green olives, sweet pear, sorghum, peas	apples, fresh beans, new cheese, endive, spinach, cherry, peach	mallow		
Cool in the 2nd degree		lentil	beef, goat, goose, heron, lemon, sour pomegranate, quail in winter, rabbit, sorrel, stag, swan, upper tripe, wild celery	orange	coagulated milk, pork	bone marrow, chard, egg white, lettuce, melong, piglet, pumpkin, vegetable marrow	plums	
Cool in the 3rd degree		laurel leaf	unripe grapes, verjuice					
Cool in the 4th degree	mushroom							

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