# COW TONGUE: THE LESS CONSUMED ORGAN MEAT BUT WITH EPIC NUTRITIONAL BENEFIT FOR HUMAN SYSTEM DEVELOPMENT

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**Abstract:** The Cow tongue (lingua) occupies the ventral aspect of the oral cavity and oropharynx. It is involved with grooming, lapping, prehension and manipulating food in the oral cavity. It is also involved in the deglutition reflex and vocalisation. The tongue is capable of vigorous and precise movements due to the apex being free of attachments to the oral cavity. With the glossy nature many people turn to shy away from it when they see it on the butchers table without thinking of its nutritional value as compared to others like beacon, ham, pork feet etc. Although it may be nutritious, there are also some health hazards it may pose especially when over eaten. This article uses empirical works to talk about the briefs of cow tongue in our weekly meals and the benefits it brings to the human system as a whole.

**Key Words:** Lingua, cow tongue, apex, palate, vitamins, minerals, nutritional value, oropharynx, frenulum, calories, saturated and unsaturated fats, milligrams, ounce, Proteins.

#### 1.0 INTRODUCTION:

When you're wandering through the grocery store trying to find something to make for dinner, you probably won't find yourself in the tiny area of the meat section where packaged cow tongues are stocked. Cow tongue certainly has a flavor unlike any other kind of meat, and if you're an adventurous eater, you may want to give a tongue a try. If you can eat an entire 3.5-ounce portion, you will get a good dose of many nutrients you need each day.

#### 2.0 DISCUSSIONS:

# 2.1 Structure and Function of Tongue (Basic anatomy and physiology)

The tongue is skeletal muscle dorsally and structural fat surrounded by a cartilagenous sheath forming lyssa (canids only) ventrally. It has an attached root and body with a free apex. The frenulum (fold of mucosa) attaches the body of the tongue to the floor of the oral cavity.

The root of tongue is attached to the hyoid bone. In the horse and dog, the tongue is 'u' shaped, becoming broader towards the tip. The furrow in the centre of the canid tongue is called the median sulcus. In the ox, sheep and pig the tongue is 'v' shaped with a pointed apex. The torus lingua is a swelling across the tongue laterally which pushes food against the hard palate.

#### 2.2 The Gross Factor

If you're not nervous about putting unknown foods into your mouth, simply simmer a cow tongue in water or broth until the meat is cooked through. Slice the cooked meat and pop it into your mouth. If you're a bit more reserved about trying new foods, combine cooked cow tongue with other foods such as soup, stew or pasta. Use your favorite seasonings to lend a savory or spicy flavor to the meat, which can also make it more palatable to you. If you find you don't enjoy the strong taste, you'll get many of the same nutrients from lean steak, ground beef or sirloin.

#### 3.0 FINDINGS:

Nutritional facts and health benefits of consuming cow tongue

# 3.1 Calories, Fat and Protein

A 3.5-ounce portion of cow tongue contains 284 calories and 22 grams of fat, of which 8 grams are saturated. That's about one-third of your limit for the day if you follow a 2,000-calorie diet. Perhaps even more alarming is the 132 milligrams of cholesterol in that same serving of tongue. That's about 44 percent of the 300 milligrams of cholesterol you should make as your upper limit each day. Keeping your intake of saturated fat and cholesterol low is a smart way to show your ticker a little love because it reduces your risk of heart disease, liver diseases, kidney and other systemic diseases.

#### 3.2 Proteins

On a more upbeat note, 3.5 ounces of beef tongue delivers 19 grams of protein, which is an impressive 41 percent of the 46 grams of protein women need each day and 34 percent of the 56 grams men should aim for on a daily basis.

Including cow tongue in your diet also helps you consume more protein. Each 3-ounce serving contains 16.4 grams of protein and, like other animal-based protein; it provides all the essential amino acids.

This means that the protein in cow tongue provides all the building blocks your cells need to assemble new proteins in your tissue -- a process that promotes tissue strength, maintains your hormone balance and helps you make antibodies essential for immune function. The amount of protein in one serving of cow tongue makes 27 percent of the daily requirements for a 165-pound person.

#### 3.3 Minerals

Beef tongue contains small amounts of selenium, potassium, magnesium and calcium. You'll also get a larger dose of iron, which your body needs for oxygen transport and red blood cell production. A 3.5-ounce portion of beef tongue contains 2.6 milligrams of iron, which is 14 percent of the 18 milligrams women need each day and 33 percent of the 8 milligrams men need daily. You'll also get 4 milligrams of zinc, a nutrient that helps your body heal from wounds and also protects the health of your immune system.

## 3.4 Iron and Zinc

Cow tongue offers some health advantages by increasing your iron and zinc consumption. Both iron and zinc maintain your health -- zinc boosts your immune system so that your body is able to fight off infection, while iron prevents anemia, a condition characterized by reduced oxygen transport, which causes fatigue. Iron also helps your cells produce energy, while zinc supports wound healing. A 3-ounce serving of simmered cow tongue contains 3.5 milligrams of zinc, which contributes 44 percent toward the daily recommended zinc intake for women and 32 percent for men. Each portion of cooked cow tongue also boasts 2.2 milligrams of iron -- 28 and 12 percent of the daily iron intakes set for men and women, respectively.

## 3.5 Vitamins

Cow tongue supplies trace amounts of vitamins C, E and K, as well as folate and vitamin B-6. If you're looking for ways to boost your intake of vitamin B-12, cow tongue might be the food for you. A 3.5-ounce serving contains 3.3 micrograms of this essential vitamin that helps you make red blood cells. That's more than the 2.4 micrograms healthy adults need each day. You'll also get about 17 percent of the riboflavin and niacin you need each day from a serving of cow tongue. Both of these vitamins help your body make energy from the foods you eat.

# 3.6 Choline and Vitamin B-12

Cow tongue's choline and vitamin B-12 content also makes it an advantageous addition to your meal plans. Both choline and B-12 play a role in nervous system health -- vitamin B-12 helps you make myelin that insulates your nerves, while choline makes up a component of chemicals needed for nerve communication.

Each 3-ounce portion of cooked tongue adds 2.7 micrograms of vitamin B-12 to your daily intake, and just one serving ensures you'll get the 2.4 micrograms needed daily. A serving of cow tongue also contains 132 milligrams of choline -- 24 percent of the recommended daily choline intake for men and 31 percent for women.

# **4.0 RECOMMENDATION:**

Watch your portion size when consuming cow tongue to avoid eating too much cholesterol and saturated fat -- they increase your blood cholesterol, which boosts your cardiovascular disease risk.

#### 5.0 CONCLUSION:

Nutritional Disadvantages with Medical Caution

If you have a daring palate, cow tongue might be featured on your dinner table. However, like other organ meats, cow tongue should make only occasional appearances in your diet; consuming organ meats on a regular basis is unhealthy because of their cholesterol content. Cholesterol aside, cow tongue does offer some advantages, providing protein, vitamins and minerals.

While it's advantageous when consumed in moderation, cow tongue's fat and cholesterol content has some drawbacks. Each 3-ounce serving of cooked cow tongue comes loaded with 19 grams of total fat, including 6.9 grams of saturated fat. This makes up almost one-third of your daily limit, based on a 2,000-calorie diet. Cow tongue also contains 112 milligrams of cholesterol per serving, which is 37 percent of the daily limit.

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