Avoiding MSG: Reclaiming our Youth, Mind, and Weight

By Stephanie Colo Manning

An ancient youth serum, homemade bone broth, has all but disappeared. It reduced wrinkles and made skin glow. It made hair silkier and strengthened nails. It eased bones and joints, and treated digestive issues. Fortunately, with a return to lost tradition and wisdom, bone broth is making a comeback as a foundation for beauty, brains, and wellness.

But where has bone broth been all these years?

Monosodium glutamate (MSG) began tricking our taste buds and pushing aside homemade broth around World War II. Food manufacturers have been adding MSG to processed foods for all these years, and it's been messing with our minds and our weight ever since.

Grandma's Chicken Soup

As a child, I was appalled as I watched my grandmother prepare chicken soup. My head turned away in disgust as she reached inside the chicken and pulled out the giblets. "What are giblets?" I asked with a grimace, and then I wished I hadn't asked. "I'll never touch that", I quietly vowed to myself.

Decades later, I experienced why there's nothing on earth like the liquid gold of homemade broth.

Others agree. Today in New York City, take-out windows serve hot cups of broth, while broth delivery start-ups and broth festivals at South Street Seaport are heating up. Natural beauty and wellness are back in style in The Big Apple.

Bone broth is a "Pillar of World Cuisine," according to Dr. Cate Shanahan, author of *Deep Nutrition.*[1] It's a fundamental ingredient in the soups, stews, sauces, and gravies of every traditional society. Sally Fallon, author of *Broth is Beautiful,* reminds us that "nothing went to waste…[everything] went into the stockpot and filled the house with the aroma of love".[2] Generations of cooks have long known of broth's contribution to well being. Shanahan tells us, "The prerequisites of health and sickness are in no way mysterious. The rules of healthy living have been passed down freely. We need only return to those foods that have taken us through the trials by which Mother Nature fine-tunes her creations.[1]

Broth as Youth Serum

Four anti-aging compounds are typically used in cosmetics and joint supplements: *collagen, glucosamine, chondroitin, and hyaluronic acid.* The ideal youth serum, however, is simple homemade bone broth (or any slow-cooked meat on the bone). Animal bones, ligaments, cartilage, tendons, meat, and skin, when slow cooked, unlock and release not only these four anti-aging compounds, but also an entire *extended family* of extraordinary molecules. And together, as part of the whole food, they provide great synergy that supplements miss. Indeed, they're the very building blocks we need to repair our skin, hair, nails, bones, and joints:

- **Collagen**: It's what beautiful skin is made of. Collagen melts into gelatin during slow cooking. Centuries of research have shown gelatin's healing power in treating digestive problems, ulcers, TB, diabetes, muscle diseases, infectious diseases, and cancer.
- **Glucosamine** and **Chondroitin**: Just two of the many joint-building molecules slowly extracted during slow cooking. They're readily absorbed into our blood stream, and have a special affinity for reaching our cartilage.[1]
- **Hyaluronic Acid**: Secures moisture and creates fullness in skin. Also, a joint-building molecule shown by peer-reviewed studies to be an effective treatment for osteoarthritis.[3]
- **Minerals, Electrolytes, Vitamins**, and **Proteins**: "Soup scraps" are nutrient warehouses. They replenish our cells with an abundance of easily absorbed raw materials that our bodies have evolved to require.

"A cure-all in traditional households — broth made from bones of chicken, fish and beef which builds strong bones, nurtures the sick, puts vigor in the step, and sparkle in love life."[2]

Good, Complex Flavor

Why does bone-in meat always taste better? Why do canned broths, soups and stews not compare to the complex flavor and comfort of homemade? The answer is because good nutrition and good, complex flavor go hand-in-hand.

"For chefs, stock is the magic elixir."[2] Slow, moist cooking of meat on the bone unlocks extraordinary molecules that release incredible, complex flavor components into the dish.

The slow, moist heat gently clips large proteins into shorter peptides. This creates tiny flavor morsels that fit perfectly into our taste buds, producing the incredible, savory "umami" taste sensation.

MSG: The Imposter that Tricks our Taste Buds

As an inexpensive, synthetic way to mimic the umami "slow-cooked meat on the bone" flavor, food manufacturers took the "clipping and unlocking" concept to the extreme. By breaking down whole proteins to their absolute tiniest components, they could extract only the meatiest-tasting ones (the free glutamates) and highly concentrate them. Today's factories use an even less expensive process: they genetically engineer bacteria to excrete free glutamates. These highly-concentrated free glutamates are then added to processed food in the form of MSG.

MSG densely packs into each of our tiny taste buds, creating intense flavor and dulling our senses. By mimicking crockpot flavors, MSG fools our brain into thinking processed food – stripped of its flavor and nutrients – tastes good.

"Manufactured foods are designed […] to 'sing' to our brain and make us feel rewarded […] stimulating serotonin and dopamine, so we want more of that food […] so we continue to eat, even when we aren't hungry," explains Dr. Elizabeth Lipski in her book, *Digestive Wellness.*[4] Some call MSG the "nicotine of food

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additives because it's highly addictive and affects the appetite mechanism in our brain that tells us to stop eating."[5]

Thus, MSG swiftly took over our taste buds.

How MSG Penetrated the Pantry

MSG was invented in Japan in 1908, and began appearing in Chinese-American restaurants and processed food in the 1930's-1940's.[6] By the 1960's, "Accent" became a kitchen staple: the secret ingredient to "wake up the flavor of food."[7]

Soon, MSG-laced bouillon cubes, sauce mixes, canned soups, and TV dinners replaced homemade broths, soups, stews, sauces, and gravies. We wanted flavor, convenience, and low-cost, and the food industry delivered.

Before we knew it, cleverly disguised MSG had infiltrated nearly every food label on supermarket shelves. The amount of MSG added to foods has doubled in every decade since the 1940's.[8]

Gelatin research abruptly came to an end, and a key source of nutrients vital to our well being rapidly disappeared from the American Diet. The wise traditions of yesteryear got pushed aside, and taking their place was a neurotoxic chemical: MSG.

MSG & The Brain: Beyond "Chinese Restaurant Syndrome"

Some say MSG is safe because glutamates are naturally found in food proteins. But we know that whenever an element is extracted from its whole food and delivered in high concentrations, the body gets overwhelmed. For example, high fructose corn syrup is the concentrated, natural sugar extracted from whole corn; when rapidly "injected" into our blood stream it leads to blood sugar and liver problems. Likewise, free glutamates are isolated from the whole food, concentrated, and get rapidly "injected" into our blood stream. They over-excite nerve impulses, causing them to fire rapidly to the point of exhaustion, neuron damage or cell death. It's too much too quickly, and our body isn't designed for these surges. For this reason, MSG is a type of neurotoxin called an "excitotoxin."

Excitotoxins cause brain damage to varying degrees. They potentially trigger or exacerbate insidious conditions such as Alzheimer's, Parkinson's, ALS, Multiple Sclerosis, Huntington's disease, Epilepsy, Dementia, ADHD, autism, learning disabilities, migraines, anxiety, insomnia, depression, dizziness, fatigue, obesity, diabetes, asthma, eczema, hormone problems and digestive issues.[8,9,10,11]

Children are most at risk, as their blood-brain barrier is not fully developed.[12] In *Unblind My Mind,* Dr. Katherine Reid reveals the key step in resolving her daughter's autism: reducing free glutamates.[9] MSG can also affect unborn children's nervous system formation.

The perils of MSG have long been known. Studies performed in 1957 showed that MSG led to blindness and obesity in mice. Studies in1969 showed MSG-induced lesions in the brain, and destruction of brain cells in the hypothalamus. "There are over a million scientific publications relating various diseases and disorders of the brain and body, associated with glutamate dysfunction."[9]

Some say MSG is only a problem for those sensitive to it, but my view is we can't always pinpoint what we're sensitive to, or how much it's "filling our bucket." Symptoms may not manifest right away: with excitotoxins, 75% of neural cells in a particular area of the brain are killed before any symptoms are noticed.[12] Some tests can detect MSG/glutamate sensitivity, but as with all food sensitivity testing, removing it from the diet is sometimes the best test of all.

MSG and Weight Gain

Further messing with our minds, MSG silences the hormone produced in our brain that tells us when we're full.

In 2008, UNC Chapel Hill Departments of Nutrition and Epidemiology authors published a study in the *Obesity* research journal. They studied 752 healthy Chinese citizens and revealed: "MSG has become a health concern with respect to epidemic overweight/obesity [...] Prevalence of overweight was significantly higher in MSG users than non-users."[13]

A separate 15-year study of over 10,000 subjects, published in 2011 in the American Journal of Clinical Nutrition, concluded: "MSG consumption was positively, longitudinally associated with overweight development among apparently healthy Chinese adults."[14]

Identifying and Avoiding MSG

Most of us unwittingly have MSG in our pantries. It's found, for example, in infant formula, soups, canned broths, dressings, hot dogs, frozen dinners, spice packets, ice cream, chips, crackers, breads, ranch-flavored foods, cheese-flavored snacks, protein bars, whey protein powder, and low-fat foods.

But don't expect to see MSG spelled out on these labels; it's disguised in startling ways. With growing awareness that MSG and other glutamates were causing adverse reactions, industry developed clever new names. "There's over 50 different ways that food manufacturers can label MSG or free glutamates."[9] Avoiding unpronounceable ingredients isn't enough. Even innocent-sounding ingredients contain MSG: Soy protein, textured protein, hydrolyzed protein, "broth", "stock", autolyzed yeast, yeast extract, malted barley, carrageenan, natural flavors, seasonings...the list goes on at http://www.truthinlabeling.org/hiddensources.html.[15]

Turning It Around

As recently as 50-85 years ago, traditional, delicious, youth-preserving foods vital to our beauty and well being began evaporating from American diets. In their place, MSG infiltrated our pantries and began tricking our taste buds, stealing our brain health, and adding on pounds. Identifying MSG on processed food labels has become a game of "Where's Waldo" – always there, but not easy to find.

Let's push MSG out of our pantries and return to our wise traditions:

- Reid suggests, "It goes back to basics: whole foods and cooking from scratch."[9]
- Use *real* flavor enhancers: herbs, spices, garlic, onions, ginger, hot peppers, citrus, and vinegars.
- Enjoy more slow-cooked foods, like homemade chicken soup, for the natural youth serum that is liquid gold.

If you have questions please email colokitchen@gmail.com. Visit www.colokitchen.com to view my past articles or to be inspired.

[1-15] Reference sources available upon request. The information presented is for general interest and is not intended as medical advice.