

# No Gut – No Glory



Resources, education, community.

# Agenda

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- My Perspective
- The Big Story
- Health Issues Associated With Gut Health
- What You Can Do To Help Your Gut



# My Perspective

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Holistic Nutritionist/Food Professional

Defender of food

Good quality delicious food

Era of blaming the food

It's not the food – it's the gut



# The Big Story

Most of what we think we know about body function was learned before we understood about the microbes in and on our body



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Gut microbes are changing everything

Biggest area of current research

Thousands of studies are being published

All looking at something we've been taught to be afraid of



# Quick Basics

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We have more microbes in our gut than we have cells in the body

Most of the microbes are beneficial

Call it “Good Bacteria”

Those that aren’t we’ll call “Bad Bacteria”

We live and thrive because most microbes (about 85 %) are good, not bad



# Fun Facts

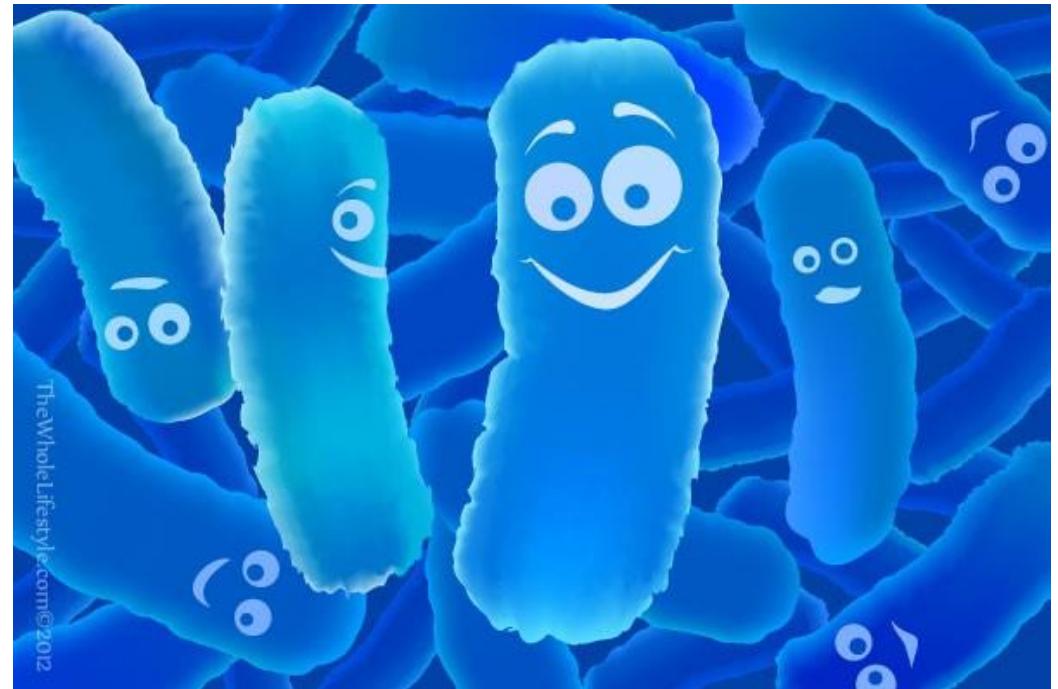
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We have about 1.5 kg of bacteria in our intestines

Half of our poop is bacteria

- Mainly good bacteria

Microbes produce 2 litres of gas per day



# In the Gut Alone

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Gut = small and large intestines

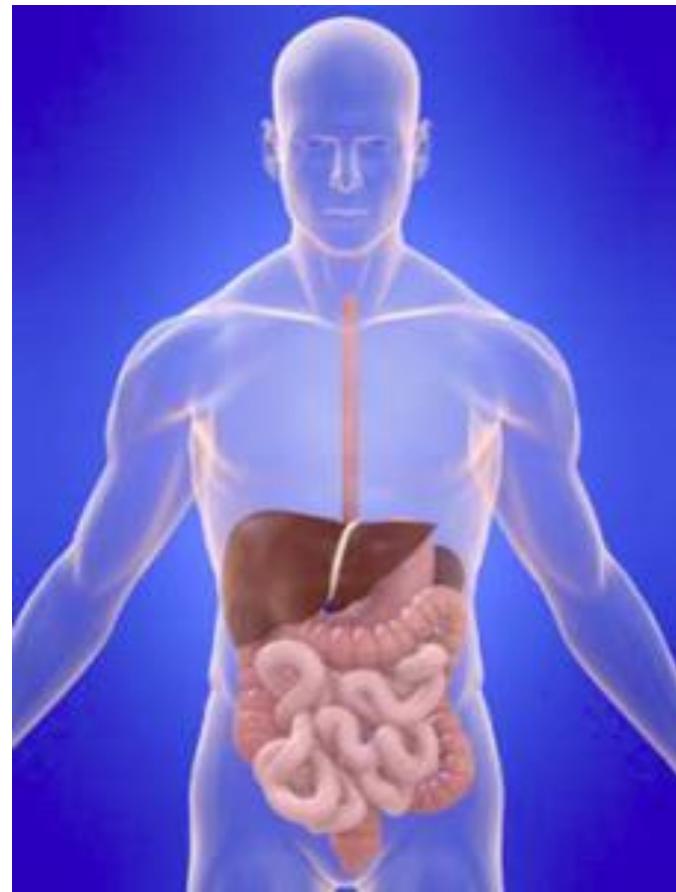
1000 Species

5000 Different Strains

As far as they know

And they add up to billions and billions  
of bacteria

There more in your mouth, skin, nose,  
urinary tract and vaginal tract – even  
some in the stomach



# In The Past

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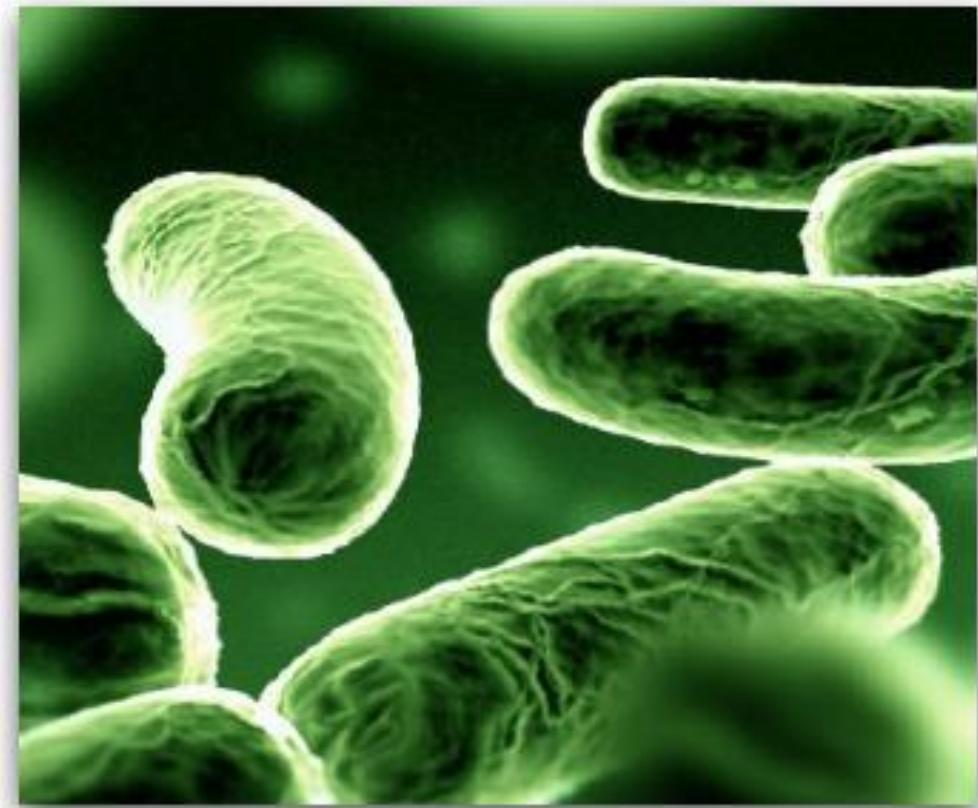
The presumed role of bacteria:

Aid digestion of food

Aid absorption

Aid the removal of waste materials from the body

This has all changed



# What Is Your Biggest Health Concern



# Connections

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Diabetes

All Digestive and Intestinal Issues

Heart Disease

All Autoimmune Conditions

Cancer

Autism

Obesity

Allergies

Arthritis and Osteoporosis

Depression and Anxiety

Alzheimer's and Dementia

Liver Diseases

Kidney Issues

Virility

Prostate Issues

Aging

# Why?

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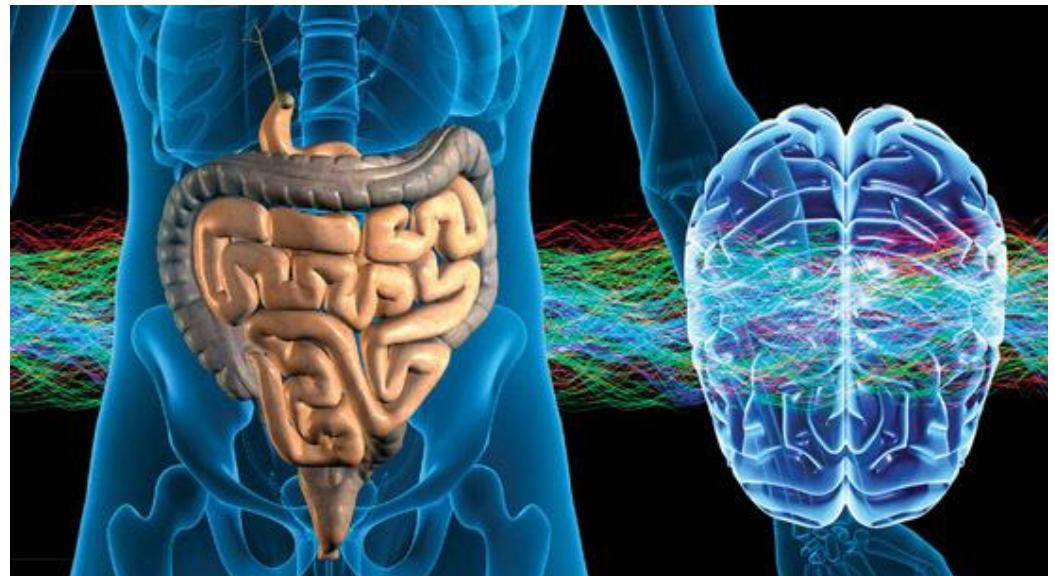
All diseases are currently being linked to gut bacteria and gut function

All goes back to the ratio of good and bad bacteria

“Dysbiosis” is a term used when there is not enough good bacteria and too much bad

The gut is called the “second brain”

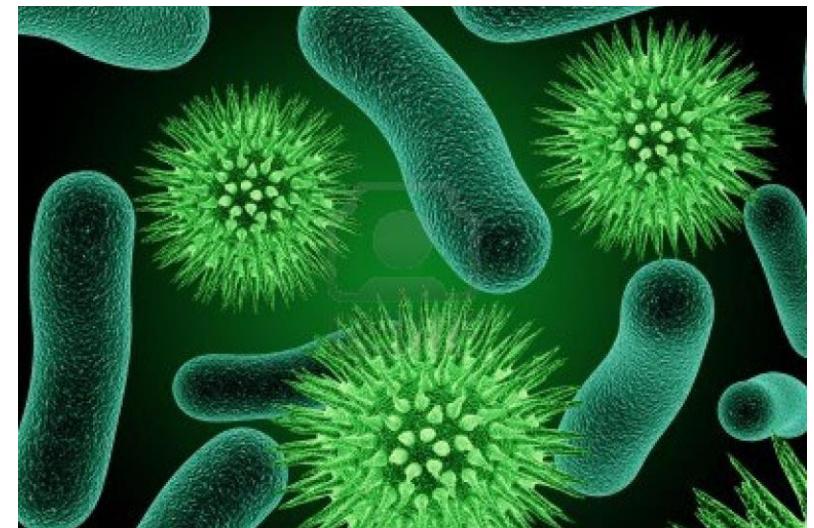
Maybe actually be the first brain because it seems to be making all the decisions



# How?

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1. Bacteria communicates to many (if not all) other areas in the body
2. They make neurotransmitters like serotonin and GABA
3. Make metabolites like Short Chain Fatty Acids which can help regulate inflammation
4. Help maintain immune tolerance which also regulates inflammation (bad bacteria linked to promoting inflammation)
5. Help eliminate toxins



# How?

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Some of these toxins are produced by bad bacteria

Toxins from bad bacteria have been linked to Alzheimer's, liver disease, kidney disease, heart disease, cancer

Main reason is the link to inflammation and the damage it causes



# How?

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Good bacteria helps lower inflammation

Potentiates nutrients and make vitamins

Has an intimate relationship with fibre and phytonutrients

Help decide what you absorb and excrete

Communicates intimately with the immune system



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Good bacteria regulates functions

Bad bacteria causes dysfunction

Now linking specific strains to specific conditions

This is where it gets difficult

You'd have to know you have those strains to be at risk

But they do not know how much you have to have or countering factors



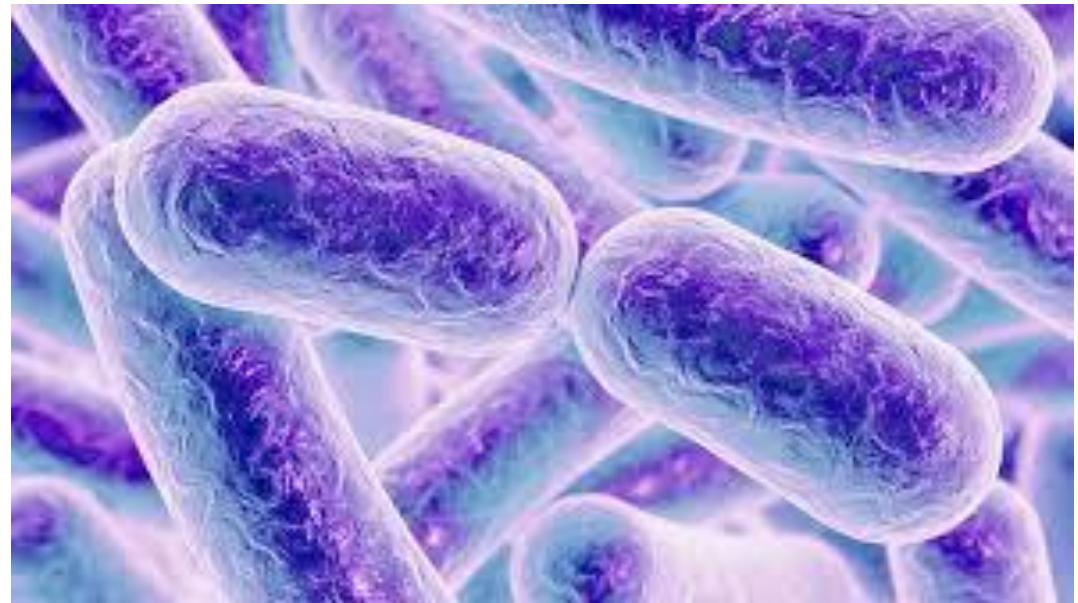
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We are all different

Like a fingerprint – no two people have the same bacteria composition

We can have a similar composition to family members

Even our pets



# Men Vs Women

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The bacteria in men is different from women

Hormones such as estrogen, progesterone and testosterone are involved in gut function

Females develop autoimmune conditions at a much high rate than males

Male bacteria transplanted into female mice at high risk for developing Diabetes Type I – they did not develop it compared to controls



# Aging

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Our bacteria composition changes as we age

When bacteria from old mice are transferred in young mice – they develop old-age conditions

What is not known if the changes in bacteria as we age are modifiable to prevent the aging conditions

Most of the connections relate to bad bacteria causing inflammation which is link to many chronic health condition



# Aging

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Study: 1000 participants, researchers found that healthy centenarians had a similar quality and quantity of gut bacteria as healthy 30 year-old youngsters

More vital and virile

Another Study: Gut of 178 elderly patients were examined and found to differ depending whether they lived in the community or long-term care facility

Link it to fragility



# Obesity

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We have obese bacteria and lean bacteria

Obese bacteria can get more calories from food than lean

When researchers transfer bacteria from obese mice into lean mice – they gain weight

And visa versa

It takes at least 1 year or longer for bacteria composition to change from obese type to lean after a weight loss program



# Memory

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A number of mice studies plus human studies that indicate that probiotics are helpful for memory

Toxins produced by bad bacteria have been linked to inflammation and damage in the brain

Anti-dementia drugs target these toxins



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60 AD patients were given probiotics for 12 weeks and show improved cognitive function

Did not show decreased inflammation which is considered a factor in AD in damage to the brain



# Heart Disease

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Different probiotics studies have looked at lowering inflammatory bio-markers for heart disease

Good bacteria can also lower inflammation linked to high blood pressure

Has the ability to regulate cholesterol levels

Regulates T-reg cells which can help protect the body from the effects of a stroke



# Diabetes Type 2

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Because good bacteria digest carbohydrates – they can regulate blood sugar and insulin resistance

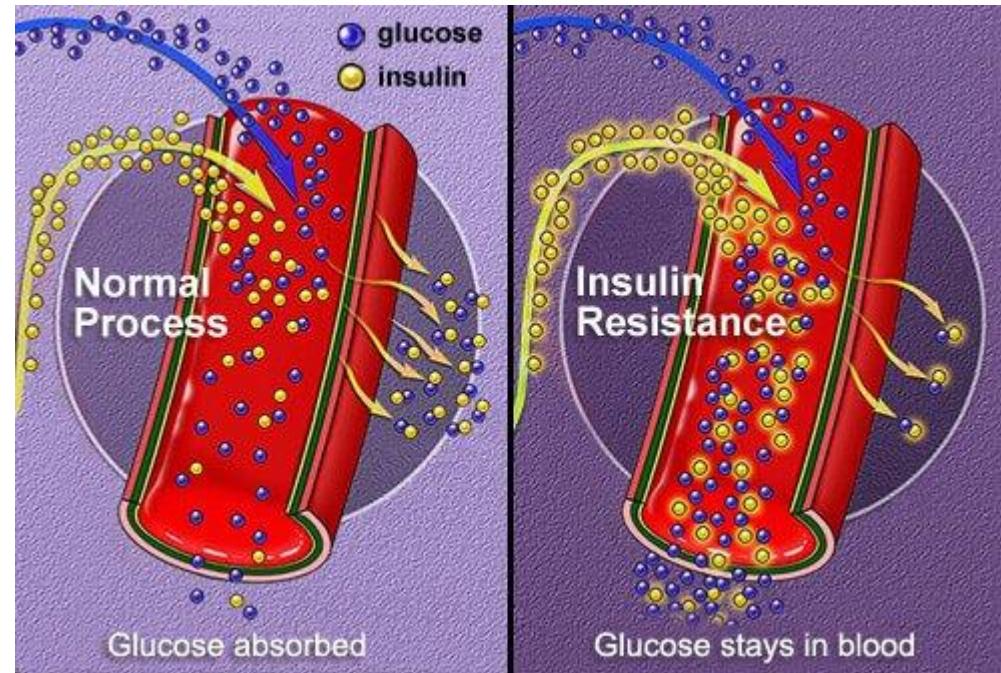
A Swedish study of 145 women found that the genes in intestinal bacteria predict diabetes more accurately than waist-to-hip ratio or body-mass index (a measure of weight relative to height).



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Study of 345 people showed that patients with Type 2 diabetes had a decrease in butyrate-producing bacteria and an increase in opportunistic pathogens

Diabetes II has been linked to chronic inflammation and good bacteria is a key player in regulating inflammation



Is This  
Familiar?

Big Gut  
Little Butt  
Syndrome



# How Do You Know?

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If you have a health condition –  
then the gut is involved

Bloating and digestive discomfort

Fatigue

Constipation and diarrhea

Headaches

Skin issues



# What Hurts The Gut

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Drugs especially antibiotics

Poor quality diet – processed, refined junk food

Stress

Lack of diversity in the diet

Lack of exposure to other bacteria

Lack of exercise



# What To Do

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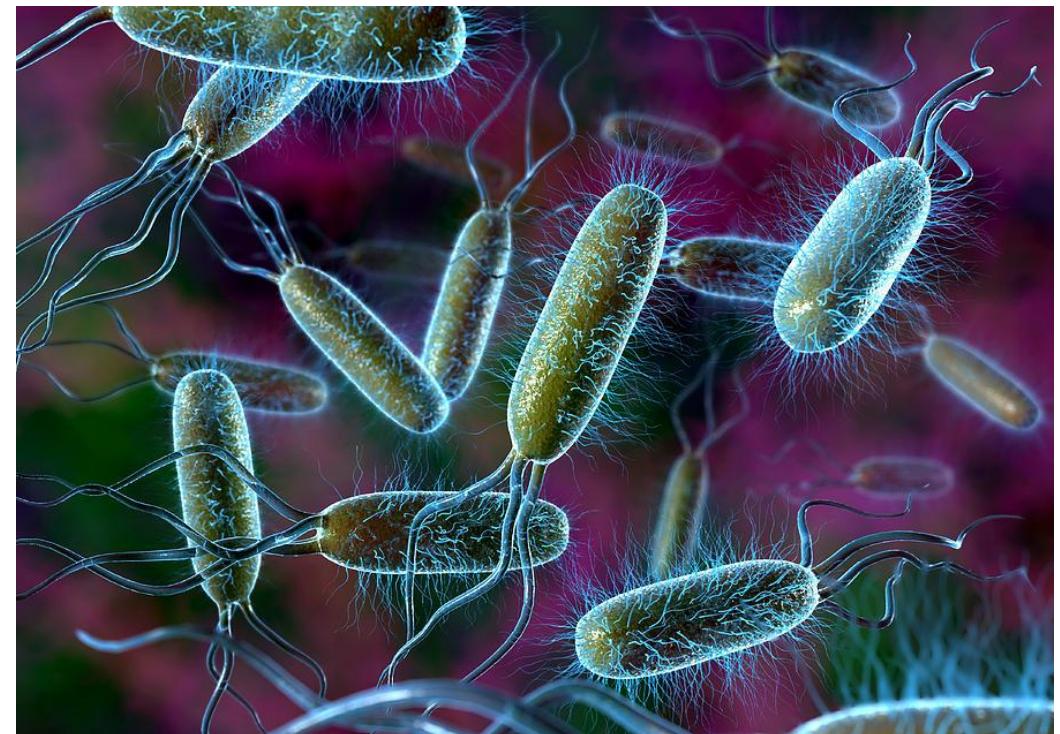
Residential bacteria – native to us

Transient bacteria – probiotic and fermented foods

The goal is to build residential bacteria

This is the best long-term strategy –  
only long-term make affect aging  
health conditions

Transient bacteria can help function  
but they are not staying



# Building Bacteria

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Eat food that feeds it

Prebiotics

Different types

Berries, broccoli, cabbage, asparagus, kale, nuts and seeds, garlic, onions, herbs, spices, tomatoes, almonds, walnuts, chocolate, apples, carrots, and many other fruits and vegetables

Resistant-starch foods: Wheat, potatoes, corn, sweet potatoes, legumes, rice, quinoa, and other grains



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Dairy products - Contains GOS

Helpful for colon bacteria, SCFA and has been shown to help with anxiety and depression

Fermented Foods: Kimchi, kefir, kombucha, yogurt, sauerkraut, wine, unpasteurized beer, apple cider vinegar

Contain both prebiotic and probiotics



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Bone broth – has nutrients that may help the intestinal lining – the home of the good bacteria

Try new foods and have a diverse diet

Supplements can also be used – probiotics, glutamine, collagen, colostrum, prebiotics

This alone is not enough



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**Chew your food**

**Our bacteria sleeps when we sleep**

**Just one night of missing sleep changes gut bacteria levels**

**Lower stress**

**Do regular exercise – mild and moderate good – excessive bad**



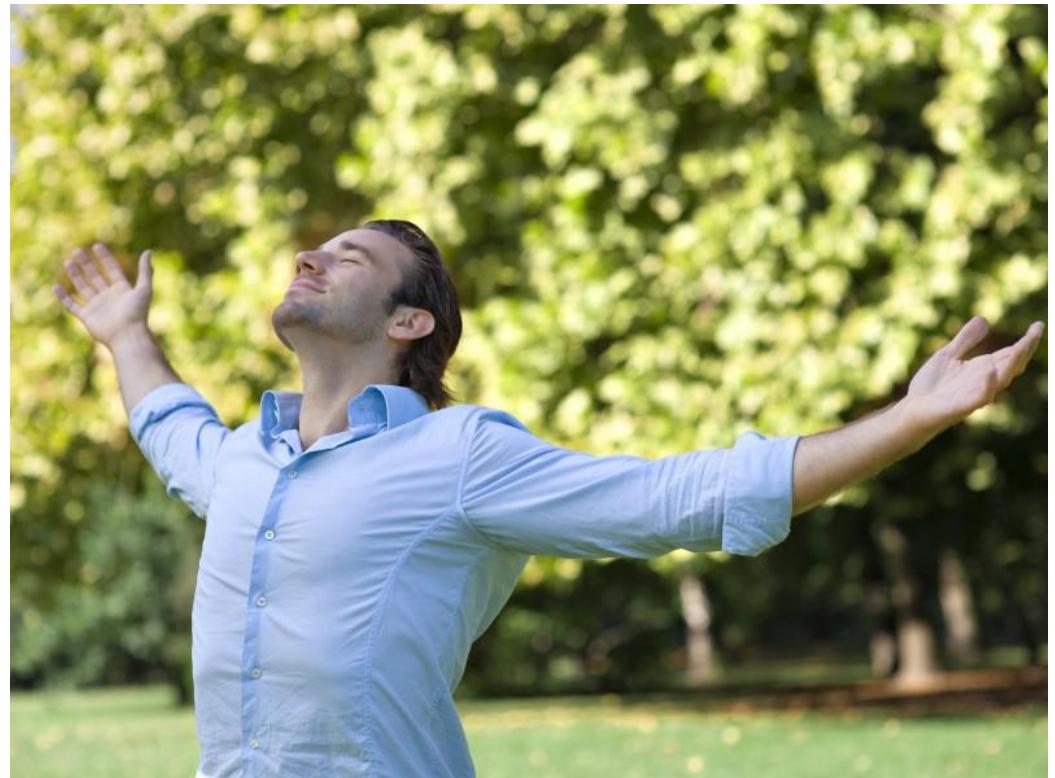
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Exposure yourself to fresh air and dirt

Don't use sanitizer on shopping carts

Good bacteria becomes stronger and smarter when exposed to bad

Pet your pets



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There is no magic pill  
And we have a lot to learn  
But you can support better gut health  
just by practising these suggestions  
You want to develop a strategy for the  
long-term  
Can be added to any existing health  
protocol  
And it's well worth your while



# Thank You!

