Chapter 24: **DYSBIOSIS/MICROBES**

The first root cause of illness we will be discussing is related to “dysbiosis.” Dysbiosis is defined as a state of altered microbial ecology that causes or contributes to disease/dysfunction. Organisms of low intrinsic virulence, such as bacteria, yeast and protozoa/parasites, induce disease or dysfunction by altering the nutrition, neuroendocrine and/or immunologic responses of a person. In other words, there are billions of organisms that reside in each of us as part of our normal flora. These organisms are vitally important to the development and maintenance of a healthy immune system. Just a few of their critical functions involve: warding off pathogens, decreasing allergic responses, and helping in the excretion of toxins. When this natural microbial balance is disrupted, illness can result. Our goal in treating dysbiosis is to eliminate pathogens, which in turn, will help to normalize mucosal function and immunity. Below, we will discuss the different organisms/pathogens that can be involved in dysbiosis. For each category of pathogens, we will discuss sources of infection, symptoms that can be related and prevention/treatment.

**PARASITES**

A parasite is a living organism that subsists at the expense of its host. A parasite can cause a variety of symptoms as your immune system reacts to its unwelcome presence. In this group, we are including worms and single-celled organisms that may be found in the stool, as well as parasites that can exist in other body systems besides the gastrointestinal tract.

**Sources**

1) Water/food contamination (more common when eating out vs. cooking at home)
2) Overseas exposure/travel
3) Sexual partners (exchange of saliva can be enough to spread infection)
4) Pets

**Most common symptoms**

1) Abdominal pain, nausea/vomiting, constipation/diarrhea
2) Irritable bowel syndrome
3) Skin rashes, eczema
4) Chronic pain
5) Fibromyalgia syndrome (FMS), chronic fatigue syndrome (CFS)
6) Nutrient depletion
7) Night sweats/chills
8) Abnormal weight loss

**Prevention**

1) Filter water
2) Be as careful as possible with food sources and restaurant choices
3) Have your partner checked to avoid infection/re-infection
4) Don’t let pets lick your face and wash your hands often if you have a lot of contact with animals

**Supplement Recommendations**

**SUPREME NUTRITION PRODUCTS**

1) Morinda Supreme
2) Melia Supreme
3) Golden Thread Supreme
4) Oral Defense

**THORNE RESEARCH**

5) Artecin
6) Berbercap

**ECLECTIC INSTITUTE**

7) Juglans Nigra

It is optimal to work in conjunction with a well versed alternative medicine physician when treating dysbiosis.

**FUNGI**

Yeast species are a normal part of our gastrointestinal ecology. However, problems arise when the yeasts overgrow and cause symptoms through a variety of mechanisms. Many aspects of modern day living favor the overgrowth of yeast, from pharmaceuticals to poor diet to environmental exposures, which will be discussed below.

While practitioners and patients involved in alternative/holistic medicine have been aware of “candida” related problems for the last few decades, there are many other species of fungi/yeast besides candida albicans that can be problematic. We do not distinguish between candida overgrowth/infections and other fungal infections because the treatment we recommend is the same regardless of the species you have. As we will discuss in the causes of fungal infections below, there are sources of exposure that you may not know about. It is important to avoid all sources in order to prevent recurrent symptoms from fungus.

Causes

1) Antibiotics
2) Steroid use (prednisone, etc.), including steroid inhalers
3) Birth control pills/hormone replacement therapy may contribute to the problem, but may not be enough to cause the problem on their own. This is less common with bio-identical hormones compared to synthetic hormones.
4) Mold exposure (via inhalation or skin contact) through workplace, home, etc.
5) Hot, humid environments (contribute to mold formation/exposure)
6) Sexual partner (exchange of saliva can be enough to spread infection)
7) Pets

Common Symptoms

1) Fatigue
2) Brain fog
3) Abdominal symptoms, nausea/vomiting, constipation/diarrhea, bloating/flatulence
4) GERD (reflux)
5) Depression, mood swings, and other psychiatric conditions
6) Migraines/headaches
7) Difficulty concentrating
8) Skin rashes, eczema, psoriasis
9) Asthma, respiratory problems
10) Nutrient depletion
11) Chronic pain
12) FMS/CFS
13) Recurrent subluxations
14) Arthritis
15) ADHD (can also contribute to autism spectrum disorders)
16) Thrush, vaginal yeast infection
17) Inability to lose weight
18) Chemical sensitivities

Prevention

1) Avoid antibiotics, prednisone, and hormones unless absolutely necessary (do not stop any prescription medications without consulting a physician). If prescription antibiotics are necessary, follow measures to prevent overgrowth of yeasts (i.e. consider taking Morinda Supreme at the same time as the medication and follow up with probiotics, eating cultured foods, and possibly taking one of the antimicrobials listed below under treatment).
2) Avoid mold exposure in work/home environment. Dehumidification may be necessary in hot/humid climates. Diffusing essential oils such as cedar oil and tea tree oil can help to lower indoor mold counts. Washing floors and walls with a borax/water solution or tea tree oil/water solution can also greatly help to reduce mold counts. If you find a water leak or water damage, and there is a possibility of mold growth, it is essential to fix the problem as soon as possible. After it is fixed, the above measures such as the essential oils and borax solution can be used. An ozonator can also be used after an area of water damage is fixed to further ensure eradication of mold. However, caution
must be used when using an ozonator. We recommend you discuss its use with a practitioner knowledgeable in environmental medicine and stay out of the house while ozonating.

3) Have your partner checked to avoid infection/re-infection.

**Supplement Recommendations**

**SUPREME NUTRITION PRODUCTS**

1) Morinda Supreme

2) Melia Supreme

3) Golden Thread Supreme

4) Oral Defense

**THORNE RESEARCH**

5) SF-722

6) Undecyn

Strictly adhering to a special diet during the 2-3 weeks of treatment for yeast/fungus is essential. You must avoid any foods with sweetening (sugar, honey, maple syrup, corn syrup, barley malt, etc.), fruit juice, dried fruit, vinegar, alcohol, soy sauce, miso, cheese, and yeast. Stevia, freshly made vegetable juice (if less than 50% carrot), unsweetened grapefruit juice and unsweetened lemon juice along with all fresh fruit are OK. You should also be checked for food sensitivities/food toxins, and avoid all that you are found to be sensitive to during the treatment period. We check for these through Applied Kinesiology testing, but there are other methods that can be used. If you do not have access to a practitioner that can check for you, it is best to avoid the major food toxins during treatment: gluten, dairy, corn, egg, soy, and solanines.

It is very helpful to have your sexual partner tested (or simply treated) as well or recidivism is possible through re-infection if he/she is a fungal carrier. If the fungus problem is not resolved within a few weeks it is most often due to a hidden fungal/mold problem in the house or your sexual partner being a carrier. If these are not addressed the problem can persist indefinitely.

**VIRUS**

When we think of viruses, most of us think of colds and respiratory infections. However, there are many different types of viruses that can cause a wide range of symptoms, as will be discussed below. Symptoms from a virus can last anywhere from a few days to indefinitely.

**Causes**
1) Airborne
2) Sexual partner (exchange of saliva can be enough to pass infection)
3) Pets

Common Symptoms

1) Respiratory symptoms (rhinitis/sinusitis, pneumonia, cough, sore throat, etc)
2) Abdominal pain, nausea/vomiting, constipation/diarrhea
3) Headaches
4) Fatigue
5) Night sweats/chills
6) FMS/CFS
7) Skin rashes
8) Swollen glands, especially cervical

Prevention

1) General hygiene practices (wash hands before eating, etc.)
2) If you work in a hospital/doctor’s office where you are around sick people, air purifiers can be used to decrease airborne transmission.
3) Have your partner checked to avoid infection/re-infection.
4) Eat a low sugar (or better yet, no refined sugar) diet.

Supplement Recommendations

SUPREME NUTRITION PRODUCTS

1) Morinda Supreme
2) Melia Supreme
3) Golden Thread Supreme
4) Oral Defense
5) Thera Supreme
6) Reishi Supreme
7) Camu Supreme

THORNE RESEARCH

8) Isatis
9) IM Encap
10) Arabinex
BACTERIA

Bacteria are single-celled organisms that grow almost ubiquitously on Earth. They are present in the environment, in the soil and in the water. They are also present in plants and animals, including humans. We all have various species of bacteria living inside our intestinal tract and on our skin. While there are many beneficial species of bacteria, there are also species that are pathogenic and can cause symptoms. While we generally think of being “infected” by a bacteria from an outside source, it is also possible for some of the species that live inside of us, that are usually harmless, to overgrow and cause symptoms. Antibiotics and some other pharmaceuticals can favor this type of bacterial overgrowth.

Causes

1) Airborne
2) Skin contact
3) Water/food contamination
4) Antibiotics and acid-blocker medications (proton-pump inhibitors)
5) Sexual partner (exchange of saliva is enough to pass infection)
6) Pets

Common Symptoms

1) Skin infections
2) Abdominal pain, nausea/vomiting, constipation/diarrhea
3) GERD
4) Respiratory symptoms (rhinitis/sinusitis, sore throat, pneumonia, cough, etc.)
5) Burning, pain with urination
6) Vaginal infections
7) Gingivitis
8) Ear pain/drainage
9) Fatigue

Prevention

1) Filter water
2) Keep the gastrointestinal tract healthy by following a nutrient-dense diet that is low in processed/high-sugar foods, avoiding food allergens/sensitivities, and limiting alcohol consumption.
3) Be as careful as possible with food sources and restaurant choices.
4) If you work in a hospital/doctor’s office where you are around sick people, air purifiers can be used to decrease airborne transmission.
5) General hygiene practices such as washing hands before eating, etc.
6) Avoid antibiotic use unless absolutely necessary. If antibiotics must be taken, follow measures to prevent overgrowth of harmful bacteria (i.e. consider taking Morinda Supreme at the same time as the medication and follow up with probiotics, eating cultured foods and possibly taking one of the antimicrobials listed below).

7) Have your partner checked to avoid infection/re-infection.

**Supplement Recommendations**

**SUPREME NUTRITION PRODUCTS**

1) Morinda Supreme
2) Melia Supreme
3) Golden Thread Supreme
4) Oral Defense

**THORNE RESEARCH**

5) Berbercap
6) Isatis
7) Phytogen
8) IM-Encap
9) Olive Leaf Extract