DIGESTION

Digestion starts in the mouth, with the production of saliva. The production of saliva engages the brain stem to help. So it is important to chew the food well, encouraging saliva production.
Dry Mouth is a problem, if this is your problem, chew very well.

After the food is swallowed, it goes to the stomach where it is broken down with hydrochloric acid. If you feel like you have a brick in your stomach after eating, you are not making hydrochloric acid. If you can get hydrochloric acid supplements, this will help, especially when you eat protein. If they are not available and you have to rely on food therapy, take 1 tablespoon of apple cider vinegar in 1/2 cup water with 1 teaspoon honey – about 10-15 min. Before the meal.

If you feel badly after eating starch, such as rice, it may be a lack of pancreatic enzymes.

If you feel bad after eating greasy or fried foods, the gallbladder is not releasing bile properly and you may find yourself burping after meals.

If you don't have pancreatic enzymes or hydrochloric acid or a properly functioning gallbladder, you won't be able to have proper microbiome.
You can do a gallbladder flush if you don't have large stones sitting in the gallbladder (see the recipe under Gallbladder Flush). If you can't fix your gallbladder, you will have to avoid fried foods indefinitely.

DIGESTION HELP

Often there is damage from using antibiotics or drugs, or just eating foods that have aggravated the digestive tissue.

There are several things you can try to help:

1. Use various probiotics to help heal the damage.

Years ago we noticed that after doing antibiotics or certain drugs, we would have many health issues. At that time, it was determined that lactobacillus acidolphilus normally residing in the bowel, was severely missing. This was called a pro (positive) biotic (bacteria), and we were told it was good for your gut and health. When you take an antibiotic or certain drugs, you kill not just the bacteria that is infecting you, you also kill off the lactobacillus acidolphilus, and many other healthy bacteria that you need for good health. Within a short period of time, you develop another infection, or yeast infections, and generally poor immunity and health. We tried to help the situation by taking some acidolphilus from the health food store, and it helped, but over the years, it just didn't solve all health problems created from the damage done. In addition, over the past 50 years or so, by using the antibiotics and drugs and poor diet, many people are now resistant to the antibiotics used to cope with infections.

Several years ago scientists got involved and found out our body actually has many, many types of bacteria (microbiome) as well as viruses and fungi that are necessary for good health; they are suppose

to be there. They started to develop probiotics for specific problems. So now we have Acidolphilus, Reuteri, Subtilis, Fermentum, Paracasei, Plantarum, Bifidum, Saccharomyces, Lactis, Longum, Breve, Rhamnosus, Acidolphilus, Casei, Coagulans, Culturelle's LGG Streptococcus Thermophjiles, B longum, Bulgaricus, Enterococcus Faecium, Animalis, Salivarius, Adolescentis, Infantis, Gasseri, Fermentum, Salivarius.... and that is just the start of the new research. All of these probiotics are taken by mouth, and they enter the digestive system to do their work in various parts of the body. This shows you just how important the digestive system is. It is the number one problem we have to address for many illnesses and so you also understand how important the diet and continued abuse will affect almost anything in the body.

We also know about PREBIOTICS - foods that you Include in your diet that actually feed the probiotics (healthy bacteria).

Prebiotics:

Foods	Herbs
Garlic, Onions, Leeks	Burdock rt
Fruit: Banana Apple, Berries	Chicory rt
Veggies: Asparagus, Jerusalem artichoke, Dandelion greens, mushrooms, peas, sweet potatoes, tomatoes, broccoli cauliflower, cassava potatoes	Green tea
	Licorice rt
	Marshmallow rt
	Psyllium
	Slippery Elm
	Dandelion rt
	Matcha
Grains: Barley, Oats, Quinoa, Buckwheat, Amaranth,	
Nuts: Almonds, Walnuts	
Seeds: Chia seeds, flaxseeds	
Inulin (from chicory root)	
Konjac root	
All beans, legumes	
Cocao	
Fermented Seaweed	
Honey	

Here are foods that provide and enhance natural probiotics:
(Probiotics that contain live microorganisms)

Probiotic Foods	Herbs to take with Probiotics
Greek yogurt, plain	Spirulina
Kefir	Chlorella
Sauerkraut	Ginger
Kimchi	Turmeric
Miso	Cinnamon
Kombucha	Slippery Elm
Pickles (dill, beets, olives etc)	Fennel
Some cheeses (Swiss, gouda, edam, raw cheddar, gruyere)	Peppermint
Tempeh	
Umeboshi	
Buttermilk	

Dark Chocolate
Apple cider vinegar
Cultured cottage cheese
Natto (fermented soy beans)
Tofu, Fermented veggies

Back to the new different types of probiotics that are available. Some are good for the bowel, some for the small intestine, some for the stomach, some for the urinary tract, some for weight loss. We checked labels and found these were the different probiotics used for various problems:

LISTS OF PROBIOTICS FOR SPECIFIC PROBLEMS:
Note: "L" stands for Lactobacillus and "B" stands for Bifidobacterium.
The difference between these two: Lactobacillus is non- motile gram positive rod shaped anaerobic bacteria, more common in the vagina and gut and produces lactic acid to maintain a healthy pH and inhibit harmful bacteria. Bifidobacterium is a motile branched gram positive anaerobic bacteria, mainly resides in the intestines and vagina and helps break down complex carbohydrates into short-chain fatty acids and produces both lactic acid and acetic acid and accounts for the majority of the gastro microbiota.
Lactobacillus is among the first colonizers in the intestine immediately after birth while Bifidobacterium colonizes later.

Probiotic bacterias to take after taking antibiotics:

L acidophilus first probiotic most of us heard about, found in the gut (digestive issues, yeast infections, eczema)
B animalis Lactis found in fermented dairy (helps gas, upset stomach, bowel movements)
B Bifidum fermented foods (gas, upset stomach)
L Salivarius lives in the gastro (helps suppress pathogenic bacteria, may also help irritable bowel, periodontal health)
Saccharomyces boulardii (fungi found in brewer's yeast, (traveller's diarrhea, from antibiotics, IBS, Crohn's ulcerative colitis). Does not colonize the gastro tract, gone within days of stopping supplementation.
L Rhamnosus GG and HN001 strains found in the gut, female urogenital (diarrhea after taking antibiotics)

For the bowel:

Bifidobacterium animalis lactis found in fermented dairy (helps gas, upset stomach, bowel movements)
L. acidolphilus (see above)
B. bifidum (see above)
Ligilactobacillus salvarius lactic acid bacteria that lives in the gastro tract (suppresses pathogenic bacteria)

For Irritable Bowel:

L. acidolphilus (see above)
Bifidobacterium animalis lactis (see above)
B. Bifidum (see above)

For the Gut:

Lactobaccilus Reuteri DSM 17938, ATCC PTA 6475 and MCIMB 30243 strains (inflammation, ulcers, h. pylori, natural anti-bacteria)
Lactobacillus Rhamnosus GG and HN001 strains found in the gut, female urogenital (diarrhea, IBS, gut health, cavities)
L. acidophilus (see above)

Bifidobacterium animalis lactis found in fermented dairy (for gut, immune, skin, respiratory)
Bifidobacterium bifidum found in human gut (for improving intestinal microbes)
Lactobacillus plantarum 299v and P-f strains found in fermented foods, makes lactic acid (weight loss, helps gut and mouth microbes)
Lactobaccilus paracasei found in human gut, often used in dairy fermentation (gut, immune)
Bacillus coagulans GBI-30,6086 and MTGCC 5856 strains. Found in kimchi, sauerkraut (helps sensitive stomachs, promotes good gut bacteria, reduces painful gas, bloating, helps bowel regularity)
Bacillus subtilus found in soil (colon, normalize bowel movements, protect gut-blood barrier, helps suppress E coli, Shigella, Staph)
Bacillus clausii found in plant soil & on surface of fresh veg. (survive more than 4 hr after hitting the stomach acid vs. L. Bifidobacterium lasts only 30 min)
Lactobaccilus salivarius (normally present in the digestive system) gut and mouth health
Akkermansia municiphilia found in gut mucosa in small and large intestines.

For the Small Intestine including SIBO:

Saccharomyces Boulardii (see above)
L. Gasseri (see above)
L. Salivarius (balances gut, gut immunity) (see above)
A good combination many have used is L Reuteri, L. Gasseri, and B. Coagulans

For Stomach Ulcers:

L. acidolphilus
B. Bifidum
Saccharomyces Boulardii

For Women's help (eg. Vaginal):

L. Acidolphilus. See above
L. Rhamnosus found in fermented foods (for gut health, diarrhea, immune)
L. Gasseri BNR17 and CP2305 strains (for weight, digestion, vaginal health)
B. Animalis. See above
B. Bifidum see above
L. Salivarius (with other lactobacilli for vaginal tract to keep acid environment

For the lungs:

L. Rhamnosus
B. lactis
L. Plantarum

For the kidneys (we notice these ingredients in Renadyl product:

S. Thermophjilus
L. Acidophilus
B. Longum

For the liver:

L. Rhamnosus
B. Breve
L. Plantarum

For urinary tract:

L. acidolphilus see above
B. animallis lactis see above
B. bifidum see above
L. Gasseri see above

L. Rhamnosus (found in female urogenital)

For the spleen:

L. Acidolphilus
B. Bifidum
B. animalis lactis

For travel:

L. Acidolphilus see above
Saccharomyces Boulardii
B. Bifidum see above
B. animalis lactis see above

For weight control:

L. gasseri (weight, digestion, vaginal) + L. reuteri boosts oxytocin, reduced appetite
L. paracasei see above
L. plantarum see above
B. bifidum see above
B. lactis see above
B. longum BB536 strain
B. breve (digestion, IDB, skin, immunity, Colorectal cancer)

Increase Muscle & Strength:

L. reuteri, also creatine 2-5g / day

For oral health (mouth): 1000 species of bacteria inhabit the mouth. Best to get your probiotic in the form of a chewing gum or lozenges, otherwise it goes down into the gut when swallowed.

L. Reuteri (gum health, inflammation) (see above). Specifically Blis K-12 and Blis M-18 strains for plaque and cavities, biofilm. Another product uses L. Reuteri DSM 17938 and L.reuteri ATCC PTA 5289.
Streptococcus salivarius K12 (bad breath, harmful bacteria)
L.Salivarius (gut & mouth health) (see above)
L. Paracasei for gums, sinuses (find in ProvaDent chewing gum)
L. Brevis (gum infections, bleeding)
L. Rhamnosus (inhibits cavity bacteria, GG strain for diarrhea after using antibiotics)
L. Plantarum 299v and P-F found in fermented foods, as in kimchi, pickles etc. makes lactic acid (weight loss, helps gut and mouth microbes)
For fungi infections: Saccharomyces boulardii (see above)

For cholesterol:

L. plantarum (see above)

For Sleep:

L. Reuteri (see above)
L. Casei Shirota found in human gut, a lactic acid bacteria. For better sleep qualilty.
L. helveticus for mood, reduces stress
B. longum for stress resilence
L. rhamnosus reducing stress and anxiety
B. Lactis enhancing gut barrier function

For Stress:

L. Reuteri (see above)
L. Casei Shirota found in human gut, a lactic acid bacteria. For better sleep qualilty.
L. helveticus for mood, reduces stress
B. longum for stress resilence
L. rhamnosus reducing stress and anxiety
B. kactis enhancing gut barrier function

For Depression and Anxiety

L. helveticus R 0052 lactic acid bacteria found in the gut. Naturally found in cheese, milk, fermented foods.
B. longum (see above) – usually taken with L. Helveticus

Mental Clarity, Focus

L. Casei

For Migraines:

L. rhamnosus
B. longum
L. acidophilus
B. bifidum
Saccharomyces boulardii
L. plantarum for inflammation
B. infantis for gut/brain axis
Streptococcus thermopilus, lactic acid works on the gut connection

Inflammation, Arthritis Pain

B. Coagulans

For Cancer:

Saccharomyces
Acidolphilus, casei, fermentum, gasseri, paracasei, plantarum, rhamnosus, salivarius most commonly used of the Lactobacillus group.
Adolescentis, animalis, bifidum, breve, longum most commonly used of the Bifidobacteria group.

For Neurotransmission:

To help increase Dopmine:
Lactobaccilus plantarum, Lactobacillus rhamnosus, Saccharomyces boulardii
To help Increase GABA production
L. Rhamnosus
L. paracasei
L. brevis
Lactococcus lactis
To help increase Acetylcholine:
Lactobacillus plantarum, Bifobacterium longum
To help increase Serotonin:
Lactobacilluls rhamnosus, Bifidobacterium infantis, Lactobacillus helveticus

For skin Problems:

L. Reuteri

L. Gasseri
B. Coagulans

Other:

A study on Alzheimer's blended acidolphilus, casei, bifidum and fermentum with some success.
Fecal implants from healthy bowel, usually infant
Akkermansia muniniphila ATCC BAA-B35 strain
Faecalibacterum prausnitzii AS-165 and L2-6 responsible for intestinal production of butyrate

Where do you get these probiotics? **We found them easily on iherb.ca and amazon.ca**

Years ago, all we had was acidolphilus. You can see from the above, things have changed quite a bit over the years, and we've only just begun. Reculturing the body with healthy bacteria is really getting down to dealing with the route cause of disorders.

They often bundle these supplements with Fructooligosaccharides (FOS), a type of carbohydrate found in plants which may be used in various forms as a low calorie sweetener. It's found in plants like blue agave, chicory root, bananas, garlic, onion, leeks, jerusalem artichokes, asparagus, yacon root. Fructooligosaccharides are subtly sweet and low-calorie. They are nondigestible, so they don't have an effect on blood sugar levels. FOS are preferable to other sweeteners because they don't affect glucose/sugar levels and don't hurt your health like artificial sweeteners. Because they are not digestible, FOS travels intact through the small intestine to the colon (large intestine), where they support the growth of healthy bacteria in the digestive tract. FOS helps suppress Clostridium perfringens, a toxic bacteria associated with food poisoning. animal studies indicated that FOS are able to reduce both weight and cholesterol levels in rats and dogs, and that these findings may also be relevant for humans. Overuse of FOS may result in diarrhea, gas, bloating and stomach cramps and may irritate irritable bowel or SIBO, however manufacturers are quite careful in dosing FOS with their probiotics.

Our scientists are becoming more adventuresome in developing help to deal with the damage we are doing to our bodies these days.
I notice that in a Gluten Relief supplement by Natural Factors, it contains an enzyme blend of: Asperfillus flavus, Bacillus subtilus, Serratiopeptidase, Aspergillus niger, Candida rugosa, as well as bromelain, papain and cellulose. How clever is that, going right down to our soil where the problems originate. And it works, I've tried it.

In addition now there are some interesting supplements to boost digestive health. I am looking at 'Inner Soil" by Primal Nutrition which has a blend of acidolphilus, lactis, plantarium, paracasei, and marine polysaccharide complex. Designs for Health have come out with "Probiospore" which has coagulans, subtlis, and clausii; this isn't on our order sheet but you can get it through amazon.com

Let's repeat, the main cause for us to be devoid in these special bacterias? The number one culprit is anti-biotics antibiotic means antibacteria. They wipe out everything, clear the playing field and when the body tries to reculture its own bacteria, the aggressive ones like candida albicans which is a fungus/yeast, begins to take over and we get all sorts of problems from digestive disorders, to yeast infections, to brain fog. Another thing that causes this disruption is birth control pills, and many other types of drugs can interfere. Also there is just a plain ol' diet that doesn't support the production of the body's healthy bacteria.

I would suggest that you listen to Dr. William Davis on youtube. He has come up with a novel idea of making a strong culture of healthy bacteria, using a yogurt maker.
Here he talks with Dr. Berg: https://www.youtube.com/watch?v=RCjQAQuWiYc
Another good interview: https://www.youtube.com/watch?v=hVpG-Z-PvKQ
Dr. Davis was also the author of the book "Wheat Belly", which became very famous.
Perhaps you want to try his super yogurt – we did and it worked fast. You can also get his book from amazon "Super Gut"
Where do you buy all these special pre and probiotics? Again, we got some from amazon.ca and quite a few from iherb.ca.

You can also see the formula in our handout "Probiotics" etc.

You can take these bacteria in capsule form, but as mentioned, tthere is a way of making these special probiotics really powerful. Listen to Dr. William Davis on youtube. He has come up with a novel idea of making a strong culture of healthy bacteria, using a yogurt maker.

Now, many doctors are focused on something about the diet that they have found worked for them. Some doctors don't like any grains, others say eat grains that are ancient or organic, still others are for only grains that are sprouted or fermented. Some doctors don't like lectins – found in grains and legumes (pulses like peas, beans, lentils). Some don't like any type of dairy products (milk, cheese, yogurt, cottage cheese). Some doctors are only for vegetarian type foods or whole food/plant based (The China Study), some like only animal meats (carnivore) some like low carb with just a little bit of veg (Keto). Many Chinese doctors don't say don't eat raw foods. Others say eat only raw foods. Some say eat a big breakfast, others say to fast until noon. There are also religious diets. Diets because you have an illness (diabetes, heart disease, crohn's, kidney failure, cancer). Many diets are designed to lose weight, but should not to be done for extended periods of time. Unfortunately, some diets leave you craving the foods that are missing from the regime.

Listen to your body. Test it, or have someone test it to see what it will and will not accept in the way of food. Test for food sensitivities. What foods are being rejected by the body? After researching all of the diet doctors out there, there are some threads that are accepted by all:

Avoid commercial sugars.
Avoid processed foods, packaged foods.
Avoid chemicalized foods.
Fermented foods help the digestive system
Avoid seed oils (canola, vegetable oil, safflower, sunflower etc.)
Do light to moderate exercise.
Drink lots of pure water.
Avoid drugs unless absolutely necessary.
And the best diet, even with all the differences of opinion, was the Mediterranean Diet because the people there are healthy and the diet is a lifetime diet, not just for one month, with lots of variety to keep the mind happy.

Here's a list of must do's also to add to your regime (they are hard to get with the diet):
4,000 IU Vit D daily (take anytime)
2,000-4,000 mg Vit. C daily (take breakfast and evening meal)
Food grade iodine (take at breakfast)
Enzymes with cooked food meals if you have low stomach acid

Magnesium in the evening.
Omega 3 fatty acids if you don't eat lots of sea fish like salmon, sardines.

HERE IS SOME OTHER THINGS TO CONSIDER:

1. **Fix Candida Issues. This is important because it might be what is at the cause of the problem.** It is caused by many things, there are not many people that don't have some sort of overgrowth of Candida Albicans. See the handout "Yeast".

2. Do a few parasite cleanses to eliminate any problem caused by these friendly invaders. Here is the formula of the one we make at our clinic: 2 ½ parts Wormwood, 4 ½ parts black walnut hulls, ¼ part ginger root, ¼ part garlic powder, 2 ½ parts cloves. Grind everything into a powder (or buy it already powdered). Cap it, and take 2 caps morning and evening, preferably on an empty stomach.

3. You can make an herbal formula to help with healing the lining of the gut. Here is our formula:
   6 parts marshmallow root powder, 1 ½ parts slippery elm powder; 1 part burdock root powder; 1 part fenugreek powder. Grind all together into a powder.D
   Mix 1 heaping teaspoon in ½ cup water morning and evening and drink it quickly so it doesn't get too thick.

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