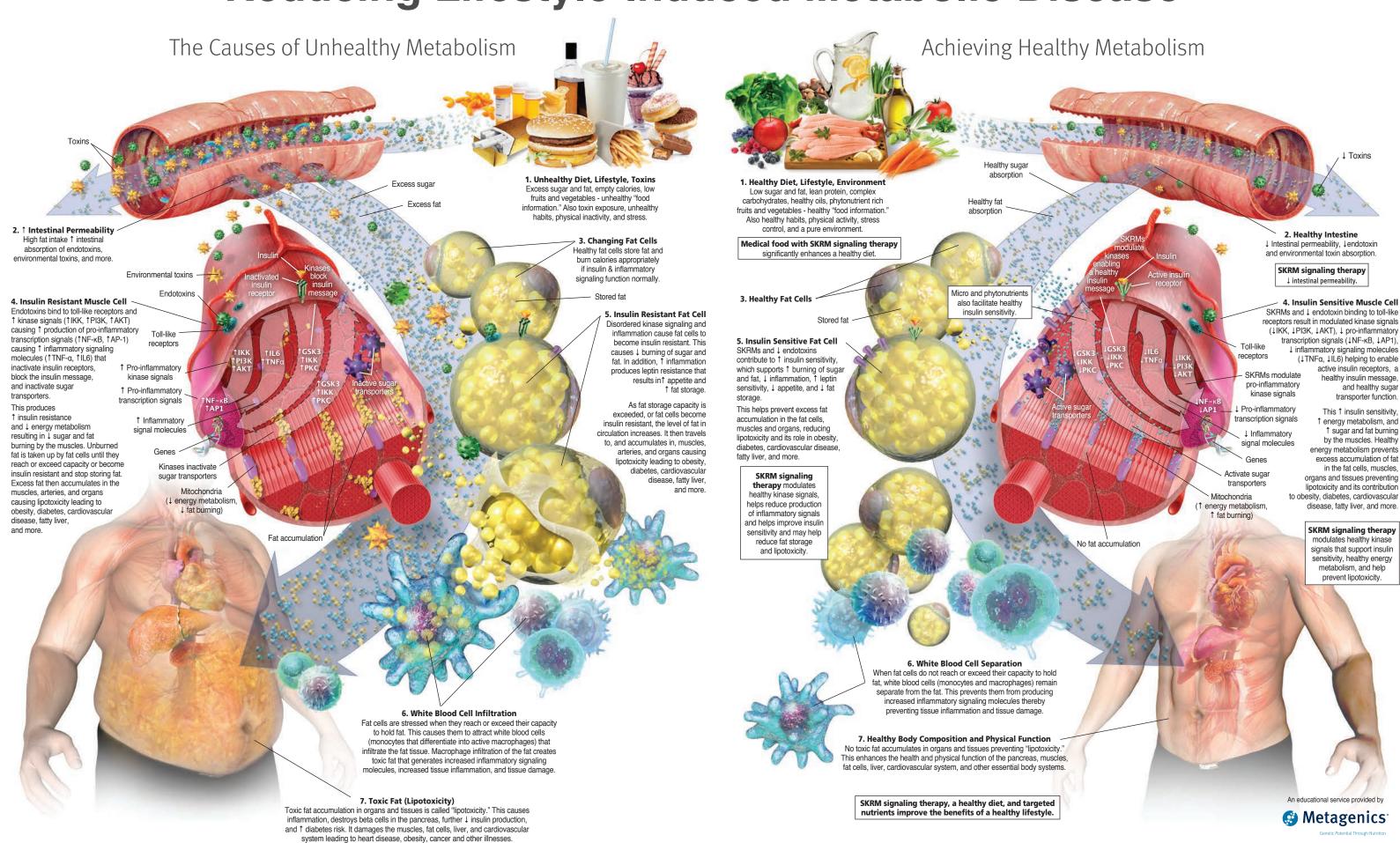
# Reducing Lifestyle-Induced Metabolic Disease



#### How does an unhealthy lifestyle cause metabolic disease?

When you eat a high fat diet that lacks sufficient quantities of fruits and vegetables it may contribute to your intestines becoming more permeable than they should be. This allows endotoxins from the bacteria that live in your intestines to be absorbed into your body which may lead to the activation of inflammation in many tissues of the body. If you are also exposed to low levels of environmental toxins or experiencing excess stress and/or physical inactivity, that may also contribute to the inflammation.

Endotoxins are toxins from bacteria including those that live in your intestines. Endotoxins indirectly cause inflammation by activating certain kinase enzymes in your cells that trigger a series of undesirable effects. The kinase enzymes signal your genes to manufacture cytokines. Cytokines are signaling molecules that directly cause inflammation in the cells of most tissues in your body including muscle, fat cells, arteries, heart, brain, liver and pancreas. The cytokines cause inflammation in those tissues and also activate other kinase enzymes that send signals that disable the cells ability to use blood sugar (glucose) for energy. This results in a cascade of negative effects such as insulin resistance, slowed metabolism, low energy, high blood sugar levels, increased appetite, increased body fat and toxic fat. This cascade of negative effects, which is primarily caused by an unhealthy lifestyle, is what ultimately leads to metabolic disease

Toxic fat (lipotoxicity), which is one of the most serious effects of this progressive disorder of metabolism, further increases inflammation and reinforces the vicious cycle of lifestyle-induced metabolic disease. Lipotoxicity makes your metabolic disorder worse. This vicious cycle is what causes symptoms to progress from fatigue and weight gain, to metabolic syndrome, to metabolic diseases like type 2 diabetes, cardiovascular disease, obesity and cancer.

#### Reversing the vicious cycle of lifestyle-induced metabolic disease

The vicious circle is initiated by the effects of an unhealthy lifestyle on kinase signaling that results in increased inflammation and decreased energy metabolism at the cell level in multiple tissues. An obvious first therapy that is essential for stopping the vicious cycle is changing to a healthy lifestyle. Your doctor will be prescribing a therapeutic lifestyle change program for you to start immediately. However a healthy lifestyle alone may take years to restore your health. Something more may help reverse the vicious cycle of metabolic disease to get you back to good health more quickly.

# The role of SKRM Signaling Therapy combined with targeted nutrition for reversing lifestyle-induced metabolic disease

SKRM Signaling Therapy involves the inclusion of specific health-promoting phytonutrients in the diet. SKRMs act as a booster therapy to your healthy lifestyle program by improving the kinase signaling that regulates inflammation and energy metabolism (insulin function, sugar and fat metabolism). SKRMs help normalize kinase signaling, which will help reduce inflammation, improve insulin function, and improve glucose and fat metabolism, thus helping to restore healthy energy metabolism and cell function. Improved cell function helps to accelerate the benefits of good nutrition and healthy lifestyle to create maximum impact on reversing the vicious cycle of metabolic disease.

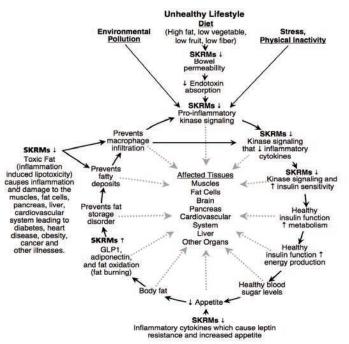
## SKRM Signaling Therapy improves effectiveness in targeted nutrition and lifestyle therapy

In the past, the state of the art in nutritional therapy was providing formulas that contained targeted nutrition that were added to a lifestyle program. The combination of targeted nutrition and lifestyle therapy provided key nourishment for the body that provided the fuel needed for recovery of normal cell function thus helping to regain health.

SKRM therapy helps to improve the signals or messages received by the genes. Targeted nutrition therapy provides the nutrition needed for gene expression in response to the kinase signals.

Because lifestyle-induced metabolic disease is related to disordered kinase signaling, SKRM kinase signaling therapy helps to achieve the best results in reversing the vicious circle of metabolic disease. Targeted nutrition only addresses part of the problem. Today by combining newly discovered SKRM therapy with targeted nutrition therapy as part of a therapeutic lifestyle program, we have much more effective natural therapeutics to offer the patient. The combination therapy provides faster results and more comprehensive recovery.

### The Role of SKRM Therapy in Reversing the Vicious Cycle of Lifestyle-Induced Progressive, Degenerative, Metabolic Disease



#### SKRM therapy more potent and selective than dietary signals alone

It has recently been discovered that food is information and not just fuel. Whole healthy food, primarily vegetables, fruit, lean meats and healthy oils provide information in the form of signals to the genes. Therefore an unhealthy diet provides unhealthy signals to your genes. This is why a healthy diet is essential to your lifestyle program. SKRM ingredients in medical foods and dietary supplements are considered food, but when combined with healthy food, are more powerful than food alone for improving specific kinase signals. SKRMs are developed from plant extracts that have been selected for their specific signaling potency for improving the kinase signaling disturbances that lead to lifestyle-induced metabolic disease. In a demonstration of the power of SKRMs, studies have demonstrated that it takes approximately two years to reverse metabolic syndrome with a healthy diet while the combination of a healthy diet, SKRMs and targeted nutrition achieves similar results in just 12 weeks.

The illustration on the other side of this page is designed to explain the underlying cause of lifestyle-induced metabolic disease and how to treat it with a healthy lifestyle, SKRMs and targeted nutrition. If your doctor has given you this educational material you may be suffering from some type of lifestyle-induced metabolic disease and it is likely that your lifestyle choices are the cause of your health problems. The illustration is designed to help you understand how lifestyle choices can make you sick, which hopefully makes it easier for you to implement the needed changes to reverse your illness and experience good health again. Many people that follow the healthy lifestyle recommendations and take the SKRMs dramatically improve their health and well being, and it is common to hear them say, "I haven't felt this good since I was in my early 20s."

# Reducing Lifestyle-Induced Metabolic Disease

### Summary of the key points of the illustration

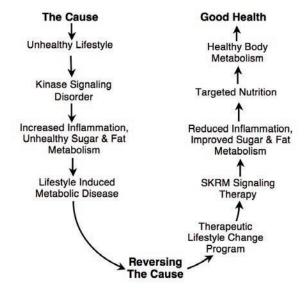
#### The cause of lifestyle-induced metabolic disease

Lifestyle-induced metabolic disease is a disorder in your body's metabolism that progressively gets worse. It is caused by an unhealthy lifestyle, which usually includes a combination of a poor diet, lack of exercise, environmental pollution, and excess stress. An unhealthy lifestyle causes a kinase enzyme signaling disturbance that increases inflammation and impairs sugar and fat metabolism. This kinase signaling disturbance is a major underlying cause of lifestyle-induced metabolic disease.

#### What is a kinase signaling disturbance?

A kinase is an enzyme that helps the body adapt to its environment. Kinases interpret the information received from the environment (food, stress, pollutants, physical activity). They then signal the genes instructing them to produce proteins that help the body adapt to the environment. A kinase signaling disturbance develops when kinases become overactive or underactive due to the prolonged reception of unhealthy environmental signals which can result from an unhealthy lifestyle.

#### Reversing Lifestyle-Induced Metabolic Disease



#### How to reverse lifestyle-induced metabolic disease

This illness can be reversed by correcting the underlying kinase signaling disturbance with a combination of a therapeutic lifestyle change program

(FirstLine Therapy®), SKRMs™, and targeted nutrition. A therapeutic lifestyle change program reduces the negative kinase signals and provides mild positive signals to hundreds of kinases. SKRMs provide potent, targeted positive kinase signals that help balance the function of specific families of kinases, for example the kinases that regulate inflammation inside the cell. SKRMs are designed to improve kinase signaling, which helps to restore specific cellular function. Once healthy kinase signaling is normalized inside the cell, energy metabolism is restored and the benefits of targeted nutrition and a healthy diet can be better used by your cells to rebuild your body's good health.

#### What is a therapeutic lifestyle change program?

A therapeutic lifestyle change program is a personalized program of assessment and instruction that provides you specific, easy to implement guidance for achieving a healthy diet, exercise and stress levels and for avoiding excess environmental pollution.

#### What are SKRMs?

SKRMs are phytonutrients shown in research to affect kinase signaling in a manner that promotes health. SKRMs can be taken orally as tablets, capsules or powders. "SKRM" is an abbreviation for Selective Kinase Response Modulators. When used in products, they are tested for their safety, potency and specificity for modulating (improving) specific kinases. While healthy food produces broad positive signaling effects on hundreds of kinases, SKRMs have potent signaling effects on select kinases. SKRMs combined with a healthy lifestyle are more powerful than food alone for improving kinase signaling disturbances. They are key therapeutics for improving disordered kinase signaling, a primary underlying cause of lifestyle-induced metabolic disease. The use of SKRMs for the treatment of kinase signaling disturbances is called *SKRM Signaling Therapy* TM\* and is a powerful new therapy that helps to improve kinase signaling function.

#### What is the unique benefit of SKRM therapy?

SKRM Signaling Therapy is uniquely beneficial because it helps improve kinase signaling to promote improved inflammation and insulin function, which can affect sugar and fat metabolism – the primary underlying cause of lifestyle-induced metabolic disease.

#### What is targeted nutrition?

Targeted nutrition is a specific combination of nutrients that supports the healthy function of the body's systems and promotes cellular health.

### Expanded explanation of the illustration

#### What is lifestyle-induced metabolic disease?

In short, it is a disorder in metabolism that progressively gets worse, caused by some combination of unhealthy diet, lack of exercise, environmental pollution and excess stress.

Typically the initial symptoms of a lifestyle-induced disorder in metabolism are weight gain and fatigue. A subsequent milestone in the progression to metabolic disease is the development of metabolic syndrome which is defined by having three or more of the following parameters: increased waist circumference (belly fat), high blood pressure, high triglycerides, low HDL cholesterol (good cholesterol), and high fasting blood sugar. The final stage of this progression to bad health is the development of a more severe metabolic disease such as diabetes, heart disease, obesity, fatty liver disease and/or cancer.

We use the term lifestyle-induced metabolic disease to describe the entire spectrum of chronic conditions that have a common underlying cause - inflammation and energy metabolism disorders (disorders of insulin, glucose and fat metabolism). These chronic conditions include metabolic syndrome, obesity, type 2 diabetes, cardiovascular disease, fatty liver disease and a group of secondary conditions associated with metabolic syndrome such as: osteoporosis, gall stones, gout, polycystic ovary syndrome, psoriasis, psoriatic arthritis, rheumatoid arthritis, restrictive ventilation disorders (asthma), obstructive sleep apnea, gastroesophageal reflux disorders (GRD), cancers of the prostate, gallbladder, kidney and pancreas commonly affecting men and cancers of the endometrium, cervix, ovary, breast and large intestine affecting women. To avoid the progression to one or more of these conditions it is essential to live a healthy lifestyle.

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