By now I am sure everyone is tired of hearing the statistics; Americans are obese and the common diseases associated with obesity are increasing at rapid rates.

It is estimated that 64 percent of Americans are overweight or obese (those with a body mass index greater than 25). The costs associated with obesity are also mind boggling (approximately $117 billion in 2000) and continually on the rise. With all of this research and information, why are we not able to make a significant change in our approach and to treating obesity?

The answer lies in the fact that obesity is one of the most complex and confusing problems in medicine today. The etiology of obesity includes multiple factors that need to be addressed in order to achieve any significant and sustained weight-loss. In addition, physicians have minimal, or no, training in the management of obesity and often lack the time or interest to properly treat these complex patients. The goal of this article is to provide a broad overview for patients to understand their treatment options.

Measuring Obesity

The initial step in any approach to obesity treatment is the assessment. All patients should be aware of their body mass index (BMI), which is a simple formula using height and weight to determine the level of obesity. (To view the formulas, please see box on page six. To interpret your BMI results, please see the chart on page 11.)

Patients should also have a waist circumference assessment because it enables physicians to estimate the amount of abdominal adiposity, which is an independent risk factor for disease. Patients with an increased waist circumference (greater than 35 inches in women or greater than 40 in men) have higher chances of developing diabetes, fatty liver disease, dyslipidemia, sleep apnea and cardiovascular disease.

Additionally there are more specialized tests typically found only in a bariatrician’s (physicians with specialty training in weight-loss treatment) office such as machines that assess metabolism by oxygen consumption and estimate lean body mass by bioimpedance.

Determining a Patient’s Readiness

After the initial diagnosis of obesity is made, the physician and patient should determine whether, and the extent to which, the patient is prepared and/or ready to lose weight. Bariatricians and their patients typically discuss the risks of obesity and the potential benefits of weight-loss; evaluate previous attempts, successes and failures; and most importantly, rule out any significant depression or depressive symptoms as a casual factor. In the latter regard, depression is very often associated with binge eating disorder or other forms of emotional eating and is a significant barrier to any long term success.
A Message from President and CEO, Joseph Nadglowski, Jr.

It is with great pleasure that I introduce you to the first issue of the OAC News, the official newsletter of the Obesity Action Coalition (OAC).

As part of our mission to elevate and empower those affected by obesity, in this and future issues, you will find a variety of educational articles discussing obesity, its treatments and consequences. You will also find inspiration from fellow patients who have successfully treated and managed their obesity.

In addition, this newsletter provides more information about how the OAC represents those affected by obesity in public policy issues and how you can become an advocate for positive change.

The OAC was created when a legislator pointed out that those affected by obesity did not have organized and independent representation in the healthcare community — specifically, that no group spoke on the behalf of obese patients. The OAC aims to fill this gap by advocating on behalf of and teaching fellow patients to become effective advocates.

If you have already joined the OAC, thank you! Please help us spread the word by sharing this newsletter with your family, friends and healthcare professionals. If you have not joined, I encourage you to become part of the OAC by completing the membership application included in this newsletter. Whether a patient, family member, friend or healthcare professional, the greater our membership, the stronger our voice.

If you have any questions about the newsletter or any of the OAC’s activities, please do not hesitate to contact our National Office at (800) 717-3117 or info@obesityaction.org. Thank you!

Sincerely,

[signature]
Obesity and type 2 diabetes are diseases that can substantially decrease life expectancy, diminish quality of life and increase healthcare costs. The incidence of obesity and diabetes continues to rise by epidemic proportions. The term “diabesity” has been coined to describe obesity-dependent diabetes.

According to the American Diabetes Association, in 2002 18.2 million people, or 6.3 percent of the population, had diabetes. Diabetes was the sixth leading cause of death listed on U.S. death certificates in 2000. The direct and indirect cost of diabetes in the U.S. in 2002 was estimated at $132 billion. It has been estimated that the annual cost of overweight and obesity in the U.S. is $122.9 billion. This estimate accounts for $64.1 billion in direct costs and $58.8 billion in indirect costs.

What is Diabetes?

Diabetes is a disease characterized by high levels of blood glucose resulting from defects in insulin production, insulin action or both. Type 1 diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. This form of diabetes usually strikes children and young adults, although disease onset can occur at any age.

Type 1 diabetes accounts for only five to 10 percent of all diagnosed cases of diabetes. Risk factors for type 1 diabetes include autoimmune, genetic and environmental factors.

Type 2 diabetes accounts for some 90 to 95 percent of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce insulin.

Risk of Type 2 Diabetes

The risk of developing type 2 diabetes is determined by some factors that can be modified and others that cannot. Some people are at higher risk for developing type 2 diabetes because of their genes. A first-degree relative of a person with types 2 diabetes has a risk five to 10 times higher than a person without a family history.

Another factor that may increase the risk of type 2 diabetes is low birth weight. Intrauterine growth restriction leading to low birth weight seems to be associated with increased risk in adulthood of insulin resistance, glucose intolerance and type 2 diabetes. However, encouraging research studies in the U.S. and abroad have found that lifestyle changes, such as changes in diet and exercise, can prevent or delay the onset of type 2 diabetes among high-risk adults.

At all ages, the risk of type 2 diabetes rises with increasing body weight. The prevalence of type 2 diabetes is three to seven times higher in those who are obese than in normal weight adults, and is 20 times more likely in those with a body mass index (BMI) greater than 35 kg/m².

Obesity’s Role in the Development of Type 2 Diabetes

It is not known for sure why some people develop insulin resistance, but it is known that obesity and lack of physical activity make it worse. The development of diabetes continued on page 4
of insulin resistance is an important component in the development of type 2 diabetes. The connection is also seen in the fact that weight-loss can improve control or cure type 2 diabetes. In addition to the degree of obesity, where the excess body fat is deposited is important in determining the risk of type 2 diabetes.

The degree of insulin resistance and the incidence of type 2 diabetes is highest in a person with an “apple” shape. These persons carry the majority of their excess body weight around their abdomen. In contrast, the “pear” shaped person carries most of their weight in the hips and thighs and this is not as likely to be associated with insulin resistance.

**Treating Obesity Will Treat Type 2 Diabetes**

Weight-loss is an important goal for overweight or obese persons, particularly those with type 2 diabetes. Moderate and sustained weight-loss (five percent to 10 percent of body weight) can improve insulin action, decrease fasting glucose concentrations and reduce the need for some diabetes medications. A program of diet, exercise and behavior modification can successfully treat obesity, but pharmacotherapy and/or surgery may be warranted.

**Diet**

Weight-loss occurs when energy expenditure exceeds energy intake. Creating an energy deficit of 500-1,000 calories per day will result in a one to two pound weight-loss per week. Writing down the food, portion size and calorie amount has been found to increase awareness and will provide objective evidence of calorie intake.

For effective weight-loss, it is the calories that count, not the proportion of fat, carbohydrates or protein. However, when individuals are losing weight they should follow a diet similar to that recommended in the U.S. Dietary Guidelines for 2005: fat 20-35 percent of calories; carbohydrates 45-65 percent; protein 10-35 percent.

For the obese patient with diabetes or insulin resistance, limiting servings of complex carbohydrates may be beneficial. These foods include bread, rice, pasta, potatoes, cereal, peas and sweet potatoes. Complex carbohydrates tend to raise blood sugar more than other foods and will cause the body to produce more insulin. With insulin resistance, these increased amounts of insulin can promote weight gain.

Increasing the amount of fiber in one’s diet may be beneficial for both diabetes and obesity. A high intake of dietary fiber, particularly of the soluble type, may improve glycemic control, decreases hyperinsulinemia and lower plasma lipid concentrations in patients with type 2 diabetes. Additionally, high fiber foods assist in weight-loss and long-term weight maintenance by: requiring more chewing and taking longer to eat, providing fewer calories per serving, creating a sense of abdominal fullness and enhancing fullness between meals.

**Physical Activity**

Regular physical activity helps maintain weight-loss and prevent regain. It also improves insulin sensitivity and glycemic control, may decrease the risk of developing diabetes and reduces mortality in patients with diabetes.

A goal should be set for 30 to 45 minutes of moderate exercise five times per week. The exercise does not need to occur in a single session to be beneficial. Dividing the activity into multiple and short episodes produces similar benefits and can enhance compliance. Using a pedometer can help set objective exercise goals. Gradually increasing the number of steps per day, with a goal of 8,000 steps, is ideal. Any increase in activity over baseline will help in balancing the equation of less calories in and more calories out to promote weight-loss.
**Medication**

There are several medications intended to treat diabetes, insulin resistance and obesity. A full review of these medications is beyond the scope of this article. However, metformin is one medication that has been found helpful in reducing the risk of type 2 diabetes in patients with insulin resistance. Metformin reduced the rate of progression to diabetes in obese persons with impaired glucose tolerance.

Men treated with metformin who had central obesity and other features of metabolic syndrome (insulin resistance, hypertension, hyperlipidemia) had slightly more weight-loss and slightly lower fasting blood gluoses that those given a placebo.

**Bariatric Surgery**

According to the National Institute of Health (NIH), bariatric surgery should be considered by those who have a BMI greater than 40, or have a BMI of 35-39.9 and medical problems such as diabetes, heart disease or sleep apnea.

Bariatric surgery changes the normal digestive process. There are three types of surgery: restrictive, malabsorptive and combined restrictive/malabsorptive. The NIH Web site provides an overview of the procedures and how they produce weight-loss.

Studies continue to show that diabetes can be cured in many patients using bariatric surgery. These clinical improvements occur not only because of the significant weight-loss, but because of hormonal changes that occur when foods bypass the stomach.

Patients and their doctors need to consider the risk of bariatric surgery compared to the risk of obesity and the associated medical problems. When other methods of weight-loss have failed, bariatric surgery may be the best chance for significant and sustained weight-loss.

**Prevention**

Preventing and treating obesity will help in the prevention and treatment of diabetes. Promoting a healthy lifestyle in children and adolescents will put them on a path that will decrease their risk of diabetes and its complications. Helping adults at high risk for diabetes to change their diet and lifestyle may prevent them from developing diabetes and its consequences.

**Complications of Diabetes**

- Heart Disease
- Dental Disease
- Stroke
- High Blood Pressure
- Kidney Disease
- Nervous System Disease
- Blindness
- Amputations
- Pregnancy Complications

**About the Authors:**

Joanne Rogers, MSN, RN, CNSN, APRN, BC-AD, is a Clinical Nurse Specialist in the Geisinger Health System. She has worked within the Center for Nutrition and Weight Management for the last 11 years. She is part of a multidisciplinary team that provides care to those with morbid obesity and co-morbid medical problems through the use of diet, exercise, behavior modification and/or pharmacotherapy and bariatric surgery.

Christopher Still, DO, FACN, FACP, has been studying developments in nutrition support and obesity for nearly a decade. He serves as principal investigator on a rural elderly nutrition and aging study of some 22,000 individuals. Dr. Still's interest in weight-loss comes from his personal experiences with obesity. Dr. Still once weighed 365 pounds, and losing the weight was a life and career changing experience. He is also a charter member of the OAC National Board of Directors.

**References:**


“Doctor, is my child overweight?” “Oh no, it is just baby fat and he’ll grow out it.” Is your son or daughter obese or overweight? Is it indeed just baby fat, and will they outgrow it?

Pediatric obesity is now of epidemic proportions in the United States. Pediatric overweight and obesity now affects more than 30 percent of children, making it the most common chronic disease of childhood.

Pediatric obesity is not just a cosmetic problem; it is a real health problem that can be associated with significant issues in childhood and in adulthood. Therefore, parents of overweight young children should not just ignore this issue, but should actively seek out help to determine why their child is overweight and what they can do to help rectify the situation.

Understanding Obesity in Children

When infants are born, they have comparatively more fat; however, this is normal and appropriate. This relatively greater amount of fat provides the infant with some nutritional reserve when they are most vulnerable and adjusting to life outside the womb. This greater amount of fat decreases as the infant grows older and throughout the first several years of life.

Around five years of age, children have the lowest amount of fat and have the lowest body mass index (BMI) – a relationship between weight and height. If a child is getting overweight between two and five years of age, this is not normal and it is not just “baby fat.” Likewise, after five years of age, an overweight child should not be treated as if it is just “baby fat” and told they will outgrow it and not to worry.

In reality, if your child is overweight or obese, you do have a cause for worry. The earlier in the child’s life that you make changes a child’s lifestyle in regards to nutrition and physical activity, the easier it is.

Measuring Obesity in Children

You may be confused with the many new terms related to obesity. There is good reason for this confusion as there is controversy over the definitions related to obesity. For adults more than 18 years of age, the definitions are based on BMI. BMI can be calculated using pounds, inches or kilograms and meters using the following formulas:

<table>
<thead>
<tr>
<th>Calculating Body Mass Index (BMI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Using pounds and inches:</strong></td>
</tr>
<tr>
<td>BMI = [ \frac{\text{Weight in pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} ] x 703</td>
</tr>
<tr>
<td><strong>Using kilograms and meters:</strong></td>
</tr>
<tr>
<td>BMI = [ \frac{\text{Weight in kilograms}}{(\text{Height in meters}) \times (\text{Height in meters})} ]</td>
</tr>
</tbody>
</table>

The normal range of BMI for adults is 18.5-24.9. A BMI of less than 18.5 is considered underweight. A BMI between 25 and 29.9 is considered overweight while a BMI of 30 and over is considered obese. Some also define morbid obesity as a BMI greater than 40.

For children, BMI is calculated in the same fashion as for adults, but there are no absolute numbers of BMI defining normal and overweight. Instead, you have to calculate BMI and plot it on a BMI curve and find the
percentile for a child. There is a BMI curve for males and a separate one for females, ages two to 18 years (www.cdc.gov/growthcharts).

### BMI Ranges in Children

<table>
<thead>
<tr>
<th>Percentile Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 percentile</td>
<td>Underweight</td>
</tr>
<tr>
<td>5 - 85 percentile</td>
<td>Normal</td>
</tr>
<tr>
<td>85 - 94.9 percentile</td>
<td>Overweight</td>
</tr>
<tr>
<td>95 percentile and above</td>
<td>Obese</td>
</tr>
</tbody>
</table>

Defined by the Centers for Disease Control and Prevention

The exact definition does not matter as much as knowing what the BMI percentile of the child is and if it is normal or abnormal, increasing or decreasing. For simplicity sake, we will use overweight and obese interchangeably.

For children less than two years of age there is no BMI curve available. Instead, you can plot the measurement on the “weight for length curve” that can be found on the “growth curve” used by healthcare providers. Normal weight is when this measurement falls between the five and 95 percentiles. A child with a “weight for length” that plots less than five percent is considered underweight and greater than the 95 percent is considered overweight.

### Causes of Childhood Obesity

Changes in the living environment (how we live, eat and act) is the major factor that has contributed to the current problem. There have been several dietary changes that have transpired over the last 20 to 30 years which have contributed to obesity.

One major factor is the frequency with which people eat out. It is now estimated that approximately 40 to 50 percent of every dollar that is spent on food is spent on food outside the home (i.e. restaurants, cafeterias, sporting events, etc.). When people eat out they tend to eat a larger quantity of food (calories) than when they eat at home. Also, foods that are consumed in restaurants tend to have more fat (higher caloric density) which in turn contributes to excessive intake of calories. This also tends to be true for meals purchased in the school cafeteria.

Providing children with money to buy their lunch at school also poses another potential problem.

Portion sizes have also increased. This is true for packaged foods and fast food restaurants. Take french fries for example. A portion size is actually 12 french fries. Most fast food restaurants have small or medium french fries, but sell more large or extra-large french fries. People do not think that a large order may actually be two or three portions.

Also, soda sizes have significantly increased. The average serving size of a soda was 6 and a half ounces in 1950, and increased to 12 ounces in the 1960’s and 20 ounces in the 1990’s. Currently, 24 and 32 ounce sodas are marketed, with a 32 ounce soda containing approximately 400 calories. The consumption of soda by children has increased throughout the last 20 years by 300 percent. Fifty to more than 80 percent of children consume at least one soda per day and 20 percent of children consume more than four per day. Scientific studies have documented a 60 percent increase risk of obesity for every regular soda consumed per day.

Box drinks, juice, fruit drinks and sports drinks present another significant problem. These beverages contain a significant amount of calories and it is estimated that 20 percent of children who are currently overweight are overweight due to excessive caloric intake from beverages.

Another major factor in contributing to the pediatric obesity epidemic is the increased sedentary lifestyle of children. School-aged children spend most of their day in school where their only activity comes during recess or physical education classes. In the past, physical education was required on a daily basis. Currently, only eight percent of elementary schools and less than seven percent of middle schools and high schools have daily physical education requirements in the U.S.

Children are also more sedentary outside of school, which is due to increased time spent doing sedentary activities such as watching television, playing video games or using the computer. Only 50 percent of children, 12 to 21 years of age, regularly participate in rigorous physical activity, while 25 percent of children report no physical activity. The average child spends two hours a day watching television, but 26 percent of children watch at least four hours of television per day.

Studies indicate that when children watch more than two hours of televi-...
sion per day there is a significant increased risk of obe-
sity as well as high blood pressure. Studies have also
determined that children who eat in front of the tele-
vision consume higher fat and salt containing foods and
less fruits and vegetables than children who do not eat in
front of the TV.

**Correlation Between Childhood Obesity and
Adulthood Obesity**

Pediatric obesity is a real and very significant health
problem that is associated with adverse effects on health
in childhood as well as adulthood. There is a high likeli-
hood of an obese child becoming an obese adult. This
risk increases as the child gets older.

The risk that an obese five year-old child remains obese
as an adult is approximately 50 percent. This increases to
more than 80 percent for an obese adolescent. On the
other hand, the risk of a normal weight child becoming
obese as an adult is only seven percent.

Childhood obesity also has adverse effects on health dur-
ing childhood. The most common consequence of child-
hood obesity is the psychosocial effect. It has been
shown that obese adolescents have higher rates of poor
self esteem, and this negative self image may carry over
into adulthood. There may also be increased rates of de-
pression in children who are overweight.

Our society also discriminates against obese individuals,
females more so than males. It has been documented that
obese females have lower acceptance rates for college
than non-obese females with the same grades and stan-
dardized test scores. The National Longitudinal Survey
of Youth study noted that obese adolescent females as
young adults had less education, less income, higher pov-
erty rate and decreased rate of marriage as compared to
non-obese adolescent females.

**Health Risks of Childhood Obesity**

There are multiple medical conditions associated with
obesity in childhood. The most common include insulin
resistance (the first step towards developing diabetes),
hypertension, liver problems and hyperlipidemia
(elevated cholesterol and/or triglyceride). While these
typically do not cause many problems in childhood, some
children will develop diabetes or severe liver disease, in-
cluding cirrhosis. Other problems that can occur include
joint problems, menstrual problems, gallbladder
disease, sleep apnea and headaches.

**Treating Childhood Obesity**

Treatment of pediatric obesity is a family affair and needs to
be directed at the family, not just the child. This is extremely
important since the home environment and family support
are important factors when trying to address pediatric obe-
sity. If the child is the only one making changes in their life,
they are less likely to be successful and are then made to feel
different. Likewise, parents who do not make healthier
changes in their lives are likely to undermine the child’s at-
ttempts.

Prior to addressing the treatment of childhood obesity, you
must first assess the readiness of the child and the family to
make changes. If the child is very depressed, this needs to be
addressed prior to working on the child’s weight problem. If
a depressed child attempts weight-loss and is unsuccessful,
this may worsen their depression or lower their self-esteem.

Similarly, if there is a lot of stress in the family at that time it
is not ideal to try and tackle yet another major issue. In some
situations where there is significant depression or stress, it
may be most appropriate for the child and the family to seek
counseling to address these issues. In addition, if parents ex-
press little concern regarding their child being overweight,
they are not ready to make the necessary changes.

Treatment of pediatric obesity is not accomplished by just
dieting. You need to address multiple aspects of the child’s
and the family’s lifestyle, nutrition and physical activity pat-
terns. Prior to discussing any treatment plans, you first must

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**Staggering Statistics**

- Only eight percent of elementary schools, and less
  than seven percent of middle schools and high
  schools, have daily physical education require-
  ments in the U.S.
- Only 50 percent of children, 12 to 21 years of age,
  regularly participate in rigorous physical activity
- Twenty-five percent of children, 12 to 21 years of
  age, report no physical activity
- The average child spends two hours a day watch-
  ing television
- Twenty-six percent of children watch at
  least four hours of television per day
determine what the desired goals are. If your child is overweight, or at risk for becoming overweight, it is important to work with your healthcare provider to develop an individualized plan of care that includes realistic goals and action steps.

**Treatment Goals**

The goals of treatment of pediatric obesity can be divided into three major areas: behavioral goals, medical goals and weight goals. The behavioral goals are to promote lifelong healthy eating and activity behaviors. Medical goals are to prevent complications of obesity in childhood and potentially adulthood, as well as improve or resolve existing complications of obesity. The weight goals are dependent on the child’s age and the presence or absence of associated co-morbidities.

**Taking the First Steps**

The first step for all overweight children is to establish weight maintenance. For children two to seven years of age with a BMI between 85-95 percent, weight maintenance is the primary goal. This is because the child will be growing taller and they have the time as well as the ability to “grow into their weight.” For those with a BMI greater than 95 percent and no associated complications, weight maintenance is still the overall goal. For those whose BMI is greater than 95 percent and have an associated co-morbidity, weight-loss should be strived for after weight maintenance is achieved. Children seven to 18 years of age with a BMI between 85-95 percent and who have no complications, weight maintenance is reasonable. However, close follow-up is needed to ensure that they are not becoming more overweight or develop a complication of obesity.

For those who have an associated co-morbidity and/or whose BMI is greater than 95 percent, weight-loss should be strived for after weight maintenance is achieved. When weight-loss is desired, it needs to be stressed that gradual weight-loss is preferable to rapid weight-loss. It is better to make gradual changes that can be maintained over time, resulting in gradual weight-loss. Ideally, you should not try to lose more than one to two pounds per week.

**Parents and Treating Childhood Obesity**

Parents are of vital importance in the treatment of pediatric obesity. Parents act as role models for their children regarding nutrition and physical activity. It is extremely important for an overweight child to see the parents being an example of what they want their child to do. Treatment needs to be family-based and individualized. By obtaining a good dietary, physical and lifestyle history, areas of potential concern for that child and family can be identified and then addressed.

**Changing Family Behaviors**

Here are tips to help change a family’s lifestyle, nutrition habits and activity level:

**Lifestyle**
1. Eat as a family.
2. Slow down the eating process.
3. Have special family time that is physically active.
4. Limit eating out or getting take-out food.
5. Pack lunch for school instead of buying lunch.
6. Do not have a television in the child’s bedroom.
7. Limit computer time to a maximum of 1-2 hours per day.
8. Do not eat in front of the television.
9. Do not use food as a reward.

**Nutrition**
1. Eat healthy, well balanced meals and snacks.
2. Plan meals and snacks in advance.
3. Offer the child a choice of healthy foods to eat.
4. Limit intake of calories from beverages.
5. Eat appropriate portion size for the child’s age.
6. Limit calorically dense foods (i.e. high fat, high sugary foods).
7. Limit treats, but do not eliminate them.

**Physical Activity**
1. Encourage daily physical activity.
2. Have a variety of physical activities that can be done.
3. Be physically active with others.
4. Limit sedentary activity.

**Three Major Areas of Treatment**

Treatment of pediatric obesity needs to focus on three major areas: lifestyle, nutrition and physical activity. (See box above for tips on changing family behaviors.) As you approach the treatment of obesity, it is important...
Modifying Your Diet

The second phase in the treatment of obesity involves a discussion of dietary options. A good general rule is to get the patient to decrease their current oral intake by 500-1000 calories per day, which translates into a one or two pound weight-loss per week. The typical caloric intake recommendation is 1000-1200 for women and 1200-1600 for men. Of particular significance, it is unsafe to fall below 800 calories per day.

As everyone is well aware, because of substantial media coverage, the choices of diets is astonishing. In general, a chronic dieter (the classic “yo-yo dieter”) knows more about the different fad diets than most physicians. Fad diets have ranged from the grapefruit to cabbage soup, to the most recent pita pocket diet. Each of these diets claim to be the next answer to long term success with weight-loss.

Perhaps the biggest and most recent craze, the “low carb” diet, is based on the fact that patients are more satiated and seem to lose more weight (at least initially) when diet plans such as Atkins and South Beach are closely followed. A collateral benefit of these diets may be that less processed food is eaten and blood glucose levels tend to stay in the normal range.

The most important and basic principle universal to all diets is that intake greater than output leads to weight gain. For this reason, I recommend portion control, avoidance of all processed foods (stick to the all natural vegetables, lean protein and fruit), consuming some good fat (olive oil, nuts, etc.) and eating small frequent meals. Patients with a higher BMI (greater than 30) may want to consider one of the very low calorie plans (such as Medifast) but should only do so under the guidance and supervision of a properly trained physician (preferably a bariatrician).

Behavior Therapy

It became very clear to me when I started to treat obesity that behavioral therapy is, not surprisingly, a huge key to long term success. There are so many emotional ties to food in that food is cheap, legal and always around when you “need it.” People eat in celebration, sadness, stress, boredom and sometimes (but not often) even when they are hungry.

Patients need to evaluate how much emotional eating exists in their day-to-day life and learn to control it in order to succeed. The quickest tool that is easy (and free) is self-monitoring. For this purpose, I recommend that patients keep a journal with every oral intake documented (be certain to carry the journal at all times, as 30 percent of calories are forgotten if recorded at the end of the day). The patient should also write down his/her mood at the time so that the reason for eating can eventually be shifted to hunger and meal times.

Often the “yo-yo dieter” will have issues such as binge eating, night eating syndrome (when 70 percent or more of the daily calories are consumed after 7 p.m.) or untreated depression. These conditions need more aggressive psychotherapy and treatment prior to attempting any aggressive weight-loss program.

Exercise

Additionally, most patients will not succeed without incorporating exercise into their daily routine. Studies have shown that patients who lose weight become more efficient at any activity. This means if you have lost any significant weight, the energy you burn walking to the mailbox will essentially be cut in half. The body adopts a “starvation” mentality and conserves energy. Therefore, you will have to make two trips to the mailbox in order to burn the same number of calories that you spent before losing weight. This explains why exercise is such a critical part of long term weight maintenance.

Many times patients just need some guidelines on what exercises they should be doing. Often it is a scheduling issue. I tell my patients that exercise should be treated as if it is one of their most important meetings or clients for the day. Many of my corporate patients actually schedule their activity time on their calendar to be sure not to miss a workout.
Treat Obesity Using Medications and Supplements

The medical approach to obesity treatment is complex. The initial evaluation needs to include testing to rule out a medical reason for the weight issue. Hormones such as cortisol and thyroid disorders may be culprits. Patients also need to be stable enough to handle a weight-loss plan (i.e. without active coronary artery disease or going through cancer therapy).

Unfortunately there are only a few weight-loss medications approved by the Food and Drug Administration (FDA). Sibutramine, Xenical and the anorexant class, such as Phentermine or Phendimetrazine, are the most commonly prescribed medications. A new medicine, Rimonabant, will likely be available for prescribing sometime after the first of the year. Rimonabant is generally safe for all patients and is said to help achieve a 20 pound weight-loss in one year.

There are also many nutritional supplements that have been advertised as treatment options for weight-loss, such as CLA and L-Carnitine, but these supplements generally lack substantial evidence supporting their efficacy.

Treat Morbid Obesity

Unfortunately, medical treatment of severe obesity using medications and supplements is weak at best (four to eight percent decrease in body weight typically seen with the above mentioned modalities). Therefore, for patients with a BMI greater than 40, bariatric surgery should be considered as the best chance at long term significant weight-loss (up to 65-75 percent decrease of excess body weight).

The most common procedure is the Roux-en-Y gastric bypass, where a portion of the small bowel is bypassed promoting weight-loss via restrictive (a small pouch size) and malabsorptive means.

The Lap-Band® procedure is a less invasive option now being commonly performed with good results. There are also some endoscopic procedures (through the mouth) being developed that may soon become an additional, less invasive, choice.

The Results of Treating Obesity

The great news about the treatment of obesity (and why those of us that choose this field love our jobs) is that most of the significant associated co-morbidities seen with obesity are resolved with weight-loss. Weight-loss can lower the mortality rate by up to 24 percent. Even losing 10 percent of your total body weight can significantly improve blood pressure, diabetic control, lipids and arthritis. Many people are also able to get off some, or even all, of their medications. Patients with diabetes or metabolic syndrome can see 75-90 percent improvement rates after gastric bypass surgery.

Therefore, patients and physicians need to approach weight-loss as a chronic disease with a focused treatment plan, which includes a team of healthcare providers. The team should include dietitians, psychologists and exercise specialists, in addition to the medical providers.

With a focused team approach, patients will have all the tools they need to not only succeed in their weight-loss attempts, but to achieve long term maintenance.

About the Author:

Lisa Saff Koche, MD, is the Medical Director for Spectra Healthcare and an Associate Clinical Professor at the University of South Florida in Tampa. Dr. Koche has practiced in obesity for seven years with aggressive medical management as well as complete medical support for bariatric surgery patients.

Body Mass Index Chart

Body Mass Index (BMI) is a measurement tool for indicating weight status. For adults 20 years and older, BMI falls into one of the following categories:

- **Underweight**: Less than 18.4
- **Normal**: 18.5 - 24.9
- **Overweight**: 25 - 29.9
- **Obese**: 30 - 39.9
- **Morbidly Obese**: Greater than 40

To calculate your BMI, please visit the “All About Obesity” section on the OAC Web site at www.obesityaction.org.
Each issue of OAC News will feature an update on the current advocacy efforts of the OAC and give you, our reader, an opportunity to get involved. The OAC encourages patients to become advocates for change. You can impact how others view obesity and influence decision makers. Help us to eliminate the negative stigma associated with obesity and make sure that obesity is treated as a disease, allowing for increased access to safe and effective medical treatment.

What is Advocacy?

Advocacy is defined as the act of pleading or arguing in favor of something, such as a cause, idea or policy. Advocacy comes in many forms. It can be communicating with your elected officials, government regulators, insurers, the media and the general public.

Why is Advocacy Important?

Elected officials, government regulators, insurers and the media play a significant role in our society and healthcare. Often, the laws, rules and/or perceptions they create directly influence our day-to-day lives and the medical treatments we receive. However, the majority of decision makers know little about obesity, its effects and treatments. The OAC seeks to increase awareness by encouraging those affected by obesity to become advocates. It is through the voice of patients, family members and medical professionals that we can spread how current, pending and future laws, regulations, policies and perceptions impact obese Americans.

The OAC’s Initial Focus

The OAC’s initial focus will be to improve access to the medical treatment of obesity. Whether medical weight management and/or weight-loss surgery, the OAC believes that patients, with guidance from healthcare professionals, should have access to and insurance coverage for the treatment of obesity. Too often insurers, employers and other payors of health benefits specifically limit or exclude the treatment of obesity. The OAC believes obesity is a disease and coverage of its treatment should be included in insurance policies. The decision not to provide coverage is a short-term economic decision that endangers the long-term health and increases future costs for obese Americans.

How to Learn More

How do you learn more about advocacy and becoming an advocate? The OAC has produced a variety of materials to guide you in becoming an effective advocate. They include our advocacy primer, “Your Voice Makes A Difference. A Guide On How You Can Help Fellow Patients Affected By Obesity,” state specific advocacy guides (see below) and a fact sheet titled, “Fact Sheet: Why it makes sense to provide treatment for obesity through bariatric surgery.”

These resources are available under the “Advocacy” section of the OAC Web site (www.obesityaction.org) or by contacting the OAC National Office at (800) 717-3117. The OAC encourages you to become an advocate for change.

Advocacy News

Medicaid Coverage of Obesity Surgery Comes Under Attack

Recently, efforts were made to eliminate coverage of weight-loss surgery under the Medicaid and low-income insurance programs in Tennessee and Wisconsin.

The OAC, among a wide group of other organizations, surgeons, physicians and patients, successfully educated legislators and regulators on the importance of accessing weight-loss surgery as a treatment option for the morbidly obese. As a result of these efforts, both Tennessee and Wisconsin have retained weight-loss surgery as a covered benefit.

Want to learn about the complimentary advocacy resources offered by the OAC? To learn more, please see page 13.
**OAC Membership Strengthens the Voice of Patients**

Membership in the OAC strengthens the voice of the millions of Americans who suffer from obesity.

The OAC needs patients, professionals and members of the public to join the Coalition to help raise the voice of those living with this disease. Membership is on an annual basis and gives you access to numerous resources. As a member of the OAC, you will enjoy exclusive benefits such as a subscription to *OAC News*, the *Obesity Action Alert* - a monthly electronic newsletter, an official membership card and much more!

Various membership levels are available. To join, please complete the membership application found on page 20 and send it to the OAC National Office. For more information on OAC membership or to join immediately, please contact us at (800) 717-3117 or visit [www.obesityaction.org](http://www.obesityaction.org).

**Take Advantage of the OAC’s Advocacy and Educational Resources**

The OAC has several beneficial resources for patients, as well as professionals. Here is a brief look at what the OAC offers:

**Obesity Action Alert**: Sign-up for OAC’s electronic newsletter distributed on the first of each month. This free e-newsletter contains current information in the obesity community, in addition to news about the OAC and how patients can get involved.

**OAC Advocacy Primer**: Request a copy of Your Voice Makes a Difference. A Guide on How You Can Help Fellow Patients Affected by Obesity. This resource teaches patients how to become effective advocates and illustrates the importance of becoming an active participant in the advocacy issues affecting patients.

**State-specific Guides to Advocating for Improved Access to Obesity Treatments**: The OAC has begun compiling guides for states with access to care issues. These guides specifically address the issues for the particular state, in addition to what action patients can take to get involved. Currently, guides are available for Connecticut and South Carolina. Additional guides will be available in the near future for Florida, Georgia, Indiana, Kansas and Virginia.

All OAC materials are complimentary. To place an order, please contact the National Office at (800) 717-3117. You may also visit the OAC Web site for a complete list of resources.
Preparation for Lap-Band \textsuperscript{®} Surgery: Nutritional Information to Know

By Felicia Cordier, RD, LD

Laparoscopic Adjustable Gastric Banding, a restrictive surgical procedure using the Lap-Band\textsuperscript{®}, is gaining popularity and acceptance in the United States healthcare industry as a safe and effective procedure for the treatment of obesity.\textsuperscript{1} With this acceptance comes a multitude of considerations. These include dietary, behavioral and lifestyle modifications that patients must be willing to adopt for life to promote successful, long term weight-loss and improved nutritional status, health and well being.

**Diet Modifications Prior to Surgery**

The procedure and related dietary protocols are relatively new to registered dietitians in the U.S. Several preoperative weight-loss strategies and dietary protocols exist and their use varies among bariatric surgeons. One surgeon may require a 10 percent weight-loss or more from their patients before surgical placement of the band and another may require their patients not to gain weight during the preoperative screening process, using their initial weight as the baseline value.

While one dietary protocol may promote the use of a total liquid, very low calorie diet for two weeks prior to surgery, another may choose to use a controlled carbohydrate, low calorie diet with the use of total liquids a minimum of 24 hours prior to surgery.

The nutritional status of the patient prior to surgery and the safety of the patient during the surgical procedure are primary concerns of the surgeon, registered dietitian and weight-loss team. No matter which one is chosen, both of the above-mentioned preoperative dietary choices are designed to support these primary concerns, and both have proven to be effective in producing positive results.

The size and condition of the patient’s liver prior to surgical placement of the band is the primary safety concern of the surgeon. The left lobe of the liver is positioned over the site of the band placement and must be repositioned to allow the surgeon access to the site. An enlarged, fatty liver is common in the morbidly obese patient and can cause the surgeon difficulty during the procedure by obstructing the view or preventing completion of the procedure due to the increased risk of damage upon repositioning.\textsuperscript{2}

A common preoperative goal is to emphasize the importance of reducing the size of the liver prior to surgery. Other important goals address improvement of overall nutritional status, setting the stage for weight-loss, implementing healthier nutrition and dietary lifestyle habits and strategies that will ensure long-term success.

Dietitians provide a framework of guidelines to help patients understand, learn and embrace how these goals may be accomplished by initiating sound nutritional and dietary lifestyle behavior modifications. These guidelines are explored below:

**Nutrition and Lifestyle Goals to Achieve Prior to Surgery**

We encourage patients to make proper food choices from these categories:

- Protein foods to include very lean cuts of beef, game, lamb, pork, poultry, seafood, eggs and soy foods
- Fresh vegetables and fruits (frozen, canned, low sodium, without sugar)
- Low-fat or fat-free dairy products

The human body will experience uncomfortable symptoms such as fatigue and headaches when certain foods, such as bread and desserts, are eliminated from the diet, but those symptoms last only a few days. Eliminating
some foods decreases the physical dependency on these foods.

This results in an increase in the patient’s energy level, an improvement in nutritional status and most importantly, a smaller liver. The following foods should be immediately eliminated after the first preoperative screening visit and continuing on through completion of surgery:

- Bread, rice, pasta and potatoes
- Crackers, chips, pretzels, or any other high-carbohydrate snack food
- Cookies, cakes, pies, candy or any sugar-sweetened food
- Sweetened drinks and full-strength juices
- Processed, fast, fried, breaded and saucy foods

Certain rules must be practiced prior to surgery to ensure success and to prevent possible complications, however more rules apply postoperatively:

- Cut food into small pieces and chew thoroughly.
- Eat slowly and pay attention to signs of fullness.
- Eliminate distractions while eating.
- Stop drinking 30 minutes before a meal and wait 30 minutes to drink after a meal.

It is noteworthy to reiterate that preoperative dietary protocols will vary among practitioners, and these protocols are effective in producing a positive result. The bariatric patient will benefit from explicitly following the dietary plan prescribed by their weight-loss team. Pre and postoperatively, if the patient embraces healthier dietary and lifestyle behaviors and they are empowered by a strong motivation and commitment to succeed, this indeed is the recipe for positive results and long term weight-loss success.

Please Note: The information contained in this article is for educational purposes only and should not be substituted for medical advice or treatment from a healthcare professional. The OAC recommends consultation with your doctor or healthcare professional before initiating any dietary plans.

About the Author:
Felicia Cordier, RD, LD, has worked for the state of Florida in public health for more than eight years. She is a contract nutritionist for Suwannee River Economic Council providing nutrition and food safety services to Putnam County Senior Congregate Meal sites.

References:
There are a number of different surgical procedures utilized for weight-loss. The most common procedure utilized is gastric bypass. In this surgery, stapling is used to create a small, upper stomach pouch which restricts the amount of food able to be consumed. A portion of the small bowel is bypassed, thus delaying food from mixing with digestive fluids to avoid complete calorie absorption. This process may cause a degree of malabsorption.

There are also procedures that restrict the capacity of the stomach by use of bands. Vertical banded gastroplasty or “stomach stapling” creates a pouch and uses a prosthetic band to restrict the outlet of this pouch. This procedure does not change the movement of food or nutrients through the alimentary pathway, and should not affect nutrient absorption.

**Drug Absorption**

Absorption of drugs occurs primarily in the small intestine, due to the increased surface area relative to other portions of the gastrointestinal tract. Absorption occurs by passage through the intestinal membrane and is influenced by the amount of time it takes for the stomach to empty. Delayed or accelerated gastric emptying could affect absorption.

Absorption theoretically may be affected by the chemical properties of the drug. Drugs, depending on acid hydrolysis to be absorbed, may have varied absorption due to the decreased gastric acid in the stomachs of gastric bypass patients.

**Drug Side Effects**

When evaluating medication dosing in a gastric bypass patient, we must be aware of that drug’s side effects. There is a wide range of side effects associated with medication therapy, such as increased appetite, fluid retention (edema), gastrointestinal irritation, bleeding or ulceration, nausea and vomiting, diarrhea, constipation, dyspepsia, increased blood pressure, etc.

**Medications**

Use of some chronic medications has been evaluated and there appear to be a few changes in absorption. Cardiac medication levels, like Digoxin, should be closely monitored to avoid toxicity during rapid weight changes. Some other drugs show no changes in absorption.

The formulation of a medication may also affect how well it is absorbed by patients. Some drugs require high levels of fluid to facilitate their action. Erythromycin base (film tab) has been shown to have a lower concentration of drug due to delays in absorption in gastric bypass patients. Speculation is that a change in gastric emptying time, resulting in increased drug time in the acidic environment of the stomach, may have eliminated the buffer or protective system in the drug and caused the erythromycin to be destroyed.

Extended-release preparations should be avoided in these patients, since the means of delayed absorption might be affected. These products cannot be crushed for easier swallowing. The delayed release system will be corrupted and can lead to an unusually large amount of medication released into the system all at once.

Drugs that are corrosive to the gastric lining are not recommended for patients. (i.e.: Aspirin, Non steroidal anti-inflammatory drugs - Ibuprofen and naproxen, Potassium supplements, to name a few).
As gastric bypass patients, you must protect yourselves. When your physician prescribes a drug for you, ask questions. Remind him or her that you are a gastric bypass patient. Request to know the effects of the drug(s) as they pertain to you. You may need to change your primary doctor to one who is knowledgeable of gastric bypass and patient needs.

**Educate Yourself**

Utilize your pharmacists. Pharmacists are experts in medication action and usage. If they do not have an immediate answer for you, they can research information in a short period of time. Select a pharmacy that you trust. "Select your pharmacist as you would select your doctor" is an old saying. You can also access various Web sites on the Internet for answers to your medication questions.

Until more research is done in this area, there are no standard rules for adjustments of medications following gastric bypass. Many patients are able to stop drug therapy for chronic conditions such as diabetes and hypertension. However, patients taking any medications should be monitored for both toxicity and increased side effects. Drugs whose dose has been established based on weight criteria should be frequently evaluated as weight-loss continues to occur.

**About the Author:**

Ralph L. Guatelli, RPH, BSPH, is currently a Pharmacy Operations Manager for PMSI of PharMerica, Inc. located in Brandon, Fla. Mr. Guatelli has also taught a pharmaceutical course at Florida Metropolitan University for the past two years.

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### Medications to Avoid

- Advil
- Alka-Seltzer
- Vanquish
- Aspirin
- Bufferin
- Coricidin

### Medications Recommended for Colds

- Benadryl
- Dimetapp
- Robitussin
- Sudafed
- Triaminic
- Tylenol Cold Products

### Medications Usually Well Tolerated

- Panadol
- Tylenol Extra Strength
- Tylenol Cold Products
- Dulcolax Suppositories
- Gas-X
- Fleet Enemas
- Phazyme
- Glycerin Suppositories

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**Medications and Childhood Obesity continued from page 9**

In addition, once one or two issues are agreed upon, close follow-up is required to monitor changes, as well as to give positive reinforcement for change in behavior even if no weight is lost. The greater the period of time between appointments with the primary care provider the less likely they are to be successful. Once the initial behavior change has been successfully accomplished, the child and family should move on to the next desired change, but at the same time continue to monitor the initial change.

**Surgery and Treating Childhood Obesity**

Bariatric surgery (weight-loss surgery) for adults with severe obesity is now being done with increased frequency. This surgery is safe and effective, but is to be used only for those with morbid obesity who meet specific criteria. At this time bariatric surgery should be considered investigational and should only be done in institutions with a comprehensive pediatric weight management program and by surgeons experienced with this type of surgery in children.

**About the Author:**

William Cochran, MD, has been a pediatric gastroenterologist & nutritionist at the Geisinger Clinic in Danville, PA since 1987. Dr. Cochran is Director of the Pediatric Weight Management Program at Geisinger. He is also a member of the American Academy of Pediatrics Task Force on Obesity and chairman of the Section of Gastroenterology & Nutrition of the American Academy of Pediatrics.
Like many others suffering from morbid obesity, the decision to choose a treatment option can be a difficult one. Much research, thought and emotion are put into this process. During this difficult time many spouses, loved ones or friends look to one another for advice and support regarding treatment choices. But, what if the one looked to for support was also searching for a morbid obesity treatment option?

Let’s journey back to November 2002. Jim Fivecoat eagerly searched the Internet and read many books looking for information on bariatric surgery. At the time, Jim weighed more than 300 pounds. The long days and nights of back aches, sore knees, blood pressure medications and cholesterol medications had finally caught up with him. He knew he had to do something quick.

“I tried everything. You name it and I tried it. The diets never worked and if they did it was only temporary. The only thing left to try was surgery,” said Jim. Jim’s feelings of disgust and aggravation with dieting are not uncommon among those suffering from morbid obesity.

Wanting to discuss the option of surgery with his wife Karen, in January 2003 he approached her about the topic. To Jim’s surprise, Karen was also researching the topic extensively, but not for him, for herself.

Karen was also morbidly obese and weighed 305 pounds. It was on a trip to St. Thomas that Karen was not able to get up out of a seat. This moment was a true realization for Karen. She knew she too had to do something soon.

“I started to talk to Karen about the surgery, and right then I knew she had been researching it too. We actually started to laugh about it. We found it ironic, but we both knew it was time to do something,” said Jim.

Eating was a recreation for Karen and Jim. Every time the family was together they ate a feast. This behavior led them to realize they were putting their bodies through a tremendous amount of unneeded stress.

Making a bold and brave move, Karen decided to have the surgery first. “I was a little nervous, but I knew I had to have it. I tried every diet on the market,” said Karen.

Finding support through each other, Jim now felt comfortable having the surgery as well. He saw how well Karen handled the surgery and felt it was time. Both Jim and Karen decided on the Roux-
EN-Y procedure. “We were cautious about the other types. We knew a friend who ‘ate through’ the Lap-Band® (a common expression used to describe the drawback of the procedure) and we wanted to make sure the treatment option we chose would be one that would last,” said Jim.

As much as Jim and Karen prepared for the surgery, it was the after effects that seemed to leave the lasting impression with them. “A lot of people say that surgery is the easy way out. I can tell you personally that surgery is not the ‘easy way.’ Mind hunger is incredibly hard to overcome. You see the food, you want the food, but you’re not hungry. It takes a while to get past that,” said Karen.

“Our surgeries were very successful. We both were back at work shortly after and felt great,” said Jim.

Like many others who choose bariatric surgery and are successful with it, Karen and Jim also started to notice changes at work and even with friends. “Losing the weight helped my career. I feel that the obesity had actually stagnated my career. I saw a lot of changes in the way people treated me,” said Jim.

Agreeing completely, Karen stated, “Obesity is one of the last sanctioned prejudices. After the surgery, guys treated me differently and I even lost some friends. You have the friends that you would eat with and now that you had the surgery you can’t do that anymore. Sometimes they understand and sometimes you just have to do what’s best for you. We need a societal change in the acceptance of obesity. We need to realize that it is a disease and it needs to be treated as one too,” strongly said Karen.

Karen and Jim have been very successful with their weight-loss and are definitely enjoying all the benefits. Jim eliminated all of his co-morbidities by losing weight. One specific area where Jim and Karen pay special attention to is the follow-up care for bariatric surgery.

“The follow up care can make all the difference. We find it extremely helpful and enjoy participating. This is not an easy thing to take on, and it never hurts to have support especially from someone who had the surgery themselves, in this case, my husband,” said Karen.

Today, Karen and Jim are enjoying themselves doing things they have not done in a very long time. For the first time in 30 years, Karen put a swimsuit on and Jim has taken up scuba diving, a sport once off limits due to his weight.

Editor’s Note: The information views and opinions contained in the “Patient Stories” section is that of the interviewee and is for educational purposes only. It should not be substituted for medical advice or treatment from a healthcare professional. The OAC recommends consultation with your doctor or healthcare professional before initiating any treatment options.
The Obesity Action Coalition is a non-profit patient organization dedicated to educating and advocating on behalf of the millions of Americans affected by obesity. By strictly representing the interests and concerns of obese patients, the OAC is a unique organization with a patient-focused approach to obesity. To learn more about the OAC, visit www.obesityaction.org or contact the National Office at (800) 717-3117.

**About the OAC**

The mission of the Obesity Action Coalition is to elevate and empower those affected by obesity through education, advocacy and support.

**OAC Resources**

Through education and advocacy, patients need to get involved to help drive change in the obesity community. The OAC provides several beneficial resources for patients, as well as professionals.

- OAC Introductory Brochure
- Obesity Action Alert
- OAC News
- State-specific Guides to Advocating for Improved Access to Obesity Treatments
- Weight-loss Surgery Coverage Fact Sheet
- The OAC Web site: www.obesityaction.org

All OAC resources are complimentary and may be ordered in bulk. To request materials or an order form, please contact the OAC National Office at (800) 717-3117 or send an email to info@obesityaction.org.

**OAC membership**

Membership in the Obesity Action Coalition allows the patient voice to be heard in the fight against obesity. By building a coalition of members, consisting of patients, family members and professionals, the OAC strives to educate and advocate on behalf of the millions who are affected by obesity. Membership benefits include:

- Official charter membership card/certificate
- OAC News - the OAC’s quarterly newsletter
- Subscription to Obesity Action Alert - a monthly e-newsletter
- Representation through advocacy in addition to information on advocacy issues concerning patients

**Membership Application**

Name: ________________

Company Name: __________________________

Address: __________________________

City: ___________ State: _____ Zip: __________

Phone: __________________________

E-mail: __________________________

**Payment Information**

Enclosed is my check made payable to the Obesity Action Coalition for $______.

Please charge my credit card for my membership fee of $______.

Credit Card #: __________________________

Expiration: ___________ Name on Card: __________________________

Signature: __________________________

* Different benefits apply. Contact the OAC National Office for more info.

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*Excludes business and institutional membership.

**Please mail to:** Obesity Action Coalition

4511 North Himes Ave, Suite 250
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**Or fax to:** (813) 873-7838

**If you have questions about OAC membership, please contact the National Office at (800) 717-3117.**