



alli[®] and Visceral Fat Fact Sheet

alli and The Visceral Fat Imaging and Multi-Center Studies

New studies show that overweight and obese people using alli (orlistat 60 mg) with a reduced calorie, lower-fat diet can significantly reduce weight, visceral fat, and waist circumference and therefore may reduce their risk of type 2 diabetes, hypertension, heart disease and stroke. In two of the studies presented at the congress, alli was evaluated to determine its effect on visceral fat.^{1,2} This new body of evidence proves that alli significantly reduces weight and dangerous visceral fat to help people improve their health.

A different kind of fat

- Body fat (adipose tissue) is stored in different compartments in the body and distribution may differ from person to person. Two places where fat is found are under the skin (subcutaneous fat) and inside the abdominal cavity (visceral fat).
- Unlike subcutaneous fat, the fat people can see and feel, visceral fat is hidden and surrounds abdominal organs.
- A large, solid abdomen can indicate the presence of visceral fat inside a person.³
- Visceral fat evolved as a short-term energy supply – it can be more easily broken down for energy than subcutaneous fat.⁴ When dieting, visceral fat is preferentially lost relative to total fat.⁵

A dangerous kind of fat

- Many studies have established the links between excess visceral fat, individual risk factors and overall disease risk.⁶⁻¹⁴
- Excess visceral fat increases the risk of serious diseases, such as type 2 diabetes, hypertension, cardiovascular disease and stroke.⁶⁻¹¹
- Type 2 diabetes and heart disease are among the leading causes of death in the developed world.¹⁶
- Excess visceral fat adversely changes metabolic profile. Insulin sensitivity decreases with visceral fat accumulation, while blood pressure increases.^{14,16-24} It also contributes to an adverse cholesterol profile^{12,14,17-21} and narrowing of the arteries with associated plaques and clots.^{14,21,23}

How visceral fat affects the body

- Visceral fat directly and indirectly affects the organs it surrounds: the liver, heart, pancreas and kidneys.
- It is more metabolically active than other types of fat^{17,18,22} and when present in excess can disrupt the normal physiological processes that maintain metabolic and cardiovascular health.
- Fatty acids from visceral fat are easily released for quick energy. These “fast release fats” can go directly to the liver, which can have serious consequences.¹⁷⁻²⁰ The greater the visceral fat deposit, the greater the amount of fatty acids that are released.
- Also, visceral fat releases hormones, fatty acids and inflammatory proteins which given its location can affect lipid metabolism, insulin sensitivity, vascular function and blood pressure.^{14,16-24}

The causes of visceral fat

- An unhealthy and a sedentary lifestyle can increase visceral fat.^{25,26}
- Age is linked to a decrease in overall metabolism so is a risk factor for visceral fat accumulation.²⁷
- Gender is also a key factor and, men generally have more visceral fat than women.^{27,28}
- Sex hormones determine where body fat is deposited²⁷ and visceral fat increases in postmenopausal women but it is unknown exactly why.^{29,30}
- The amount of visceral fat also varies with ethnicity. Middle-aged and older African-American men and women were shown to have lower visceral fat when compared with Caucasians, despite similar overall body-fat measurements.^{31,32} Certain Asian populations have significantly more visceral fat making up their total body weight, even though they are generally of smaller trunk size than Caucasians.³³

Assessing visceral fat

- An ‘apple-shaped’ figure, with a relatively large waist circumference, is predictive of excess visceral fat and increased health risk.^{6-8,10,34-37}
- Waist circumference is the best practical way to assess visceral fat.^{35,36,38} It often shows a clear relationship with serious disease risk.^{35,36} Lower waist circumference cut-off points are used^{33,34} with some populations, for example South Asians, where relatively smaller deposits of visceral fat can aggravate metabolic risk factors:
 - Men are at increased relative risk if they have a waist circumference of greater than 102 cm (40 inches) or more – 90 cm (35 inches) for South Asians

- Women are at increased relative risk if they have a waist circumference of greater than 88 cm (35 inches) or more – 80 cm (31 inches) for South Asians.^{34,35}
- To measure waist circumference, locate the upper hip-bone. Place a measuring tape around the abdomen and ensure that the tape is parallel to the floor. The measurement is made at the end of a normal breath.³⁸

Reducing visceral fat

- Losing visceral fat clearly reduces health risks³⁹⁻⁴³ and even modest losses can make a substantial improvement to health.^{42,43}
- Regular exercise²⁵ and a reduced calorie, lower-fat diet²⁷ can reduce visceral fat.
- When you take alli along with a reduced calorie, lower fat diet, you can lose about 50 percent more weight than by dieting alone.⁴⁴

Helpful tips for reducing visceral fat

- Avoid crash diets and quick fixes – they rarely work over the long term.
- Decide on your weight loss goal:
 - Determine how much weight you want to lose and set a target weight
 - A realistic starting goal is to lose between 5-10 percent of your starting weight
 - Aim for sensible, gradual weight loss – about ½-1 kg (1-2 lbs) a week is ideal.
- Set and stick to realistic daily calorie and fat targets:
 - Write down what you eat in a food diary including the fat and calorie intake
 - Eat 500 calories fewer per day than your body needs to maintain your current weight
 - Consider your activity level – the more active you are, the higher your calorie target
 - Eating fewer than 1,200 calories per day is not recommended.
- Eat a balanced diet, containing a range of different nutrients and learn to eat healthily for the long term.
- Become more active:
 - There are many ways to increase your physical activity and it is possible to find something to suit any kind of lifestyle
 - Make it enjoyable, start slowly and work your way up to more frequent exercise
 - Incorporate some daily activities into your routine, like taking the stairs instead of the elevator or getting off the bus a couple of stops early
 - As little as half an hour of moderate activity every day, such as brisk walking, can be enough to have a positive impact on weight loss. For example, a person weighing 69 kgs (152 lbs) could lose approximately:
 - 155 calories from 30 minutes walking
 - 230 calories from 30 minutes swimming
 - 355 calories from 60 minutes gardening
 - 480 calories from 30 minutes running
 - Activities that you can do as a family or with friends can help with motivation and help you to stick to it.

Visceral fat and alli

- New data from two clinical studies of alli demonstrate that weight loss programs with alli and a reduced calorie, lower-fat diet significantly reduced levels of harmful visceral fat, body weight and waist circumference.^{1,2}
- alli is the only FDA-approved OTC weight loss aid that is clinically proven to boost weight loss by 50 percent and significantly reduce excess visceral fat. Working in the digestive tract, alli prevents about 25 percent of the fat that a person eats from being absorbed.⁴⁴

The Visceral Fat Imaging Study

The three-month study demonstrated that:

- Visceral fat was reduced in over 70 percent of alli users who had an increased waist size and followed a reduced calorie, lower-fat diet¹
- alli, with a reduced calorie, lower-fat diet, reduced body weight by 5.6 percent* and visceral fat, the harmful fat within the abdomen, by 10.6 percent* when used for 3 months in people with increased waist size¹
- Body mass index (BMI) was reduced by almost 2 units (on average) in alli users with increased waist size who followed a reduced calorie, lower-fat diet¹

The Visceral Fat Multi-Center Study

The six-month study demonstrated that:

- alli, with a reduced calorie, lower-fat diet, also reduced body weight and visceral fat significantly more than diet alone²

*Mean value

Visit www.myalli.com for interactive tools, lower-fat recipes, physical activity tips and other useful information to help you lead a healthy life

Contact details

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