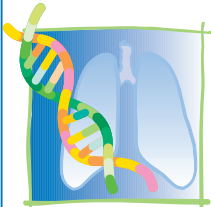
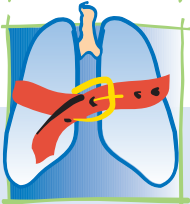


## Want to find out more?

“Living with Alpha-1-Antitrypsin Deficiency“ is a patient information program. Its aim is to explain the causes, risks and treatment of the disease. The brochures illustrated below can be ordered free of charge on the internet at [www.alpha-1-info.com](http://www.alpha-1-info.com)



Breathless –  
The Whys and Wherefores



What happens in  
Alpha-1-Antitrypsin Deficiency?



What can individuals with  
Alpha-1-Antitrypsin Deficiency  
do for their health? (Additional  
brochures on nutrition, exercise,  
and stress management)

**Talecris**  
BIOTHERAPEUTICS

Talecris Biotherapeutics GmbH  
Lyoner Strasse 15  
D-60528 Frankfurt am Main  
Germany  
[www.talecris.eu](http://www.talecris.eu)  
[www.alpha-1-info.com](http://www.alpha-1-info.com)

PRO043EUJ0708

## How can people with Alpha-1-Antitrypsin Deficiency protect their lungs?



*Living with  
Alpha-1-Antitrypsin  
Deficiency*

Patient Information Program

## About this booklet

You have been diagnosed with Alpha-1-Antitrypsin Deficiency (AAT Deficiency).

It is especially important for individuals with AAT Deficiency to protect their lungs against infections and environmental irritants. The aim of this booklet is to help you with this.

Please remember: No booklet can replace a discussion with your doctor. You should therefore consult your doctor if you still have any questions after reading this booklet.

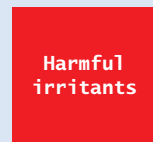
## Why is it so important to protect the lungs?

Certain irritants can accelerate the decline in lung function. Some of these irritants, for example tobacco smoke (the most important one by far), air pollutants and dust, are environmental. But factors produced by the body itself can also adversely affect lung function, for example substances produced by the body in response to an infection. The best protection for your lungs is to avoid such harmful irritants.

## What happens in Alpha-1-Antitrypsin Deficiency?

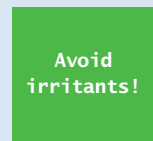
Under normal conditions the enzyme neutrophil elastase helps eliminate any infectious agents and dust particles you inhale with the air you breathe. Once neutrophil elastase has done its job, its activity must be neutralized by AAT, a protective enzyme in the lungs, so that healthy lung tissue is not damaged. Individuals with too little AAT are unable to neutralize neutrophil elastase. The enzyme is not halted in time and starts to break down normal lung tissue. The result is a slowly progressive deterioration of lung function.

*Lung damage in AAT Deficiency:*



- Smoke
- Environmental pollutants
- Infections

*Measures to protect the lungs:*



## Tobacco smoke

Smoking is especially harmful for people with AAT Deficiency. It releases increased amounts of neutrophil elastase, thus accelerating damage to the lungs. In addition, cigarette smoke destroys the little AAT that is present in the lungs. If you smoke, you should quit as soon as possible! Certainly it is no easy matter to stop smoking, but you can do it. There are programs to help you kick the habit. Have a word with your doctor about aids that can help you quit smoking more easily and with less distress. It would be good if other family members who smoke give it up at the same time as you. Alpha-1 centers in Germany and Austria also offer smoking cessation programs. For information see the website at [www.alpha-1-center.com](http://www.alpha-1-center.com).



Even passive smoking is harmful! Ask everyone who smokes in your vicinity to refrain from doing so.

## Environmental pollutants

People with AAT Deficiency should avoid the following environmental irritants:

### Irritants at the workplace



Be sure to wear a mask if you are exposed to dust particles or vapors at work. If possible, ask to be transferred to a workplace with more favorable working conditions. You may want to speak to an environmental officer or occupational doctor.

### Air pollution



Heed any ozone warnings on the radio, especially in the hot summer months. If ozone levels are high, try not to venture outside and avoid physical exertion.

### Open fireplaces



Open woodburning fireplaces release harmful particles that can lead to deterioration of lung function in individuals with AAT Deficiency. You should therefore avoid open fireplaces and woodburning stoves.

## Infections of the Lungs

Your body reacts to an infection by producing more white blood cells to fight the invading microorganisms. However, white blood cells release neutrophil elastase, which, as mentioned, leads to deterioration of lung function in individuals with AAT Deficiency.



### Prevention and treatment of infections

- Avoid contact with anyone who has a cold or flu.
- You should get used to consulting your doctor at the first sign of a cold or flu-like symptoms.
- You should also talk to your doctor about getting immunizations against flu and pneumococcal infections.

### Practical hygiene tips:

- Wash your hands frequently and avoid shaking hands if possible.
- Protect yourself from airborne infections by carrying facial masks i.e. when using the public transport system.
- When waiting in your doctor's office, try to take an early appointment in order to avoid crowded waiting areas.
- If possible, stay away from people that have a cold, especially children often have a runny nose and could easily infect you.

### Summary

- **Don't smoke!**  
*Even passive smoking is harmful.*
- **Avoid contact with environmental irritants.**
- **Minimize the risk of lung infections and consult your doctor even at the slightest sign of an infection.**