

## "Wearing Off" in Parkinson's Disease

### What is "Wearing Off"?

"Wearing Off" is a term used to describe when a person with Parkinson's disease (PD) feels that the benefit of their levodopa medication has begun to fade away, and do not last until the next dose of medication.

The "Wearing Off" phenomenon in PD is associated with long-term use of levodopa containing medicines (trade names Sinemet, Madopar or Stalevo).

"Wearing Off" most likely occurs due to the disease progression and the loss of the dopamine-producing cells in the brain, which results in the feeling that the effects of the levodopa medication is gradually fading away but this can be managed effectively once it is identified.

### How is "Wearing Off" identified?

"Wearing Off" can be identified by both the person with Parkinson's and a Doctor or PDNS following a clinical examination and a discussion of the history of your symptoms.

Sometimes the diagnosis of "Wearing Off" can initially be missed as they may be infrequent and predominately non-motor, for example a feeling of anxiety or sweating. There are many other non-motor "Wearing Off" symptoms including speech problems, reduced dexterity, cloudy mind, pain, abdominal discomfort, temperature changes, and numbness. "Wearing Off" motor symptoms include re-emergence or worsening of tremor, slowness, stiffness, problems with balance, and difficulty arising from a chair.

Also, as all the symptoms of PD and "Wearing Off" are individual to everyone, so it is important that you talk through your symptoms with your doctor or PDNS.

It may be beneficial to use a "Wearing Off" diary, which allows you to record your PD symptoms and medications over a number of days to give the Doctor an overview of how you are doing. These are available online at [www.wearingoff.com](http://www.wearingoff.com) or from the national office 1800 359 359.

### Is "Wearing Off" serious?

The "Wearing Off" phenomenon is a common complication in PD. However, it is important to remember that the vast majority of people taking Levodopa, including those who experience "Wearing Off", lead active lives.

### How is "Wearing Off" managed?

"Wearing Off" can be treated in a number of different ways.

Initially, the most important thing to do is ensure that you are taking your medication correctly to guarantee that you are getting the most benefit from your drugs.

- Take each levodopa 30-40mins prior to, or 1 and a half hours after meals, with a full glass/ mug of fluid – water, juice, etc (not milk – see below). This will allow the medication to travel into the bowel, where it is absorbed from.
- Manage constipation – if your bowel is full, your medication may not be as effective. Whether you manage it with diet or laxatives, it is important that you are proactive in preventing constipation.
- Protein in the diet can interfere with the absorption of levodopa into the bloodstream. Foods which contain high levels of protein include all dairy produce, nuts, eggs, meat and fish. It may be helpful to limit protein consumption at the same time that you take your tablets. This can help the levodopa treatment to be more effective in the daytime, when it is likely to be needed more. However, as protein is essential for a healthy diet, the amount of protein consumed daily should not be reduced. For more information, see: Diet in Parkinson's Disease.

There may come a time when your doctor feels that a change to your medication regime may be necessary to help deal with "Wearing Off". There are many options available now, from long acting Dopamine Agonists to Enzyme Inhibitors which can allow the levodopa to work more smoothly and effectively, which would promote continuous delivery of dopamine to the brain.

The "Wearing Off" phenomenon is a common consequence of the treatment of PD, but there are methods and strategies available to help overcome the symptoms.

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### **Other Relevant Information Sheets:**

M1.1: Motor Fluctuations in Parkinson's Disease  
M1.3: On-Off in Parkinson's Disease  
M1.4: Dyskinesias in Parkinson's Disease  
M1.5: Freezing in Parkinson's Disease  
G8: Diet and Parkinson's Disease

DISCLAIMER – The information on these pages is not intended to be taken as advice. No changes to your treatment should be made without prior consultation with your doctor or allied health professional.

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