

The Relationship of Sleep and Hunger

How much sleep you get can affect the hormones in your body that control your metabolism (how your body turns food into energy) and appetite (how much you want to eat certain foods).

Why is sleep important?

The one-third of your life that you spend sleeping is not wasted time. Sleep is responsible for how full, happy and rewarding your waking hours can be. For example, good sleep habits help your body:

- Process and save memories
- Repair muscles
- Boost your immune system
- Control your appetite
- Recharge

How do sleep and hunger impact each other?

When you do not get enough sleep, you can feel groggy and tired. It can also make you hungrier. There are two main hormones that affect hunger and satiety (feeling full):

Ghrelin - “The Accelerator”

Ghrelin is a hormone that is released by your stomach. It tells your brain it needs energy. When you do not get enough sleep, your levels of ghrelin will rise which causes you to feel hungry even if your body does not need more food.

Leptin - “The Brake”

Leptin is a hormone that is released by your body’s fat cells. It tells your brain how much energy your cells have. When your body feels full or satisfied, you will have a high leptin level. When your leptin levels are high, your ghrelin levels are low so you do not feel hungry.

The balance between leptin and ghrelin also affects the way that you process and store calories. Too much ghrelin and not enough leptin can cause weight gain.

Sleep	Ghrelin	Leptin	How You Feel
Not Enough	High ↑	Low ↓	Hungry
The Right Amount	Low ↓	High ↑	Full

To Learn More

- Child Wellness
206-987-2613
- Ask your child’s healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.



Seattle Children’s offers interpreter services for Deaf, hard of hearing or non-English speaking patients, family members and legal representatives free of charge. Seattle Children’s will make this information available in alternate formats upon request. Call the Family Resource Center at 206-987-2201. This handout has been reviewed by clinical staff at Seattle Children’s. However, your child’s needs are unique. Before you act or rely upon this information, please talk with your child’s healthcare provider.

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