

# STRENGTHENING THE BRAIN

Many people think of the brain as a mystery. Many people also believe that a person is born smart, average, or just not good at something. However, new research from leading scientists shows the brain is like a muscle. The brain changes and gets stronger when we use it.

Your son or daughter begins a period of fast change, starting at age ten. The brain is growing along with the body. Just like a muscle, the brain needs challenge and exercise to grow to its full potential. Like a coach supporting an athlete, you can help your youth develop his or her brain!



## Brains grow like muscles. How do we know?

Many studies have proven brain growth. In one study, twin rats were raised in two different places. One cage was bare with just food and water. The other cage had lots of puzzles, toys and exercise equipment. In the bare cage, rats just ate and drank and lay around. In the cage with hard things to do, rats were busy

exploring. The rats in the puzzle cage became much smarter than the other rats. Even their brains grew heavier. This research shows that a brain gets smarter when it works hard.

## Can a belief change the future?

When you believe you can shape and grow your basic qualities, you have what scientists call a “growth mindset.” They tell us that youth with growth mindsets are more likely to have bright futures than those who don’t have this belief. Your youth can manage life’s challenges and reach great success with three things: effort, adjusting strategies and seeking help.

Unfortunately, some people do not know abilities can change. They believe that people have a certain amount of intelligence and that’s it. They believe personalities cannot be changed much. Scientists call this belief a “fixed mindset.” This belief prevents youth from learning and growing to be their best.

When youth with a fixed mindset find something hard, they quit. They try to appear smart by sticking with easy things. These youth don’t see challenge as a chance to grow. Without meaning to, when adults have fixed mindsets about youth, they can limit their growth.





## Take advantage of this brain growth period!

The emotional centers of the youth brain grow first. “Thinking” areas aren’t fully developed until age 25. This means that the youth’s brain is ready to be shaped by effort and experience. Through your praise and support of that brain muscle, you can help your son or daughter reach for success.

## How can you help your youth?

### Tip #1: Promote Effort & Learning!

The brain gets stronger with challenge. Help your youth accept challenge by praising his or her effort. Mention details of what you saw. Be specific so that your youth knows you saw these skills:

Skill:	Instead of saying: 	Try this: 
Lots of effort	"Wow, you make it look easy."	"Your practice is paying off!"
Adjusting strategies	"You keep making mistakes." OR "Would you make up your mind and get this done."	"I really like how you learned from your mistakes." OR "I like how you kept trying new ways to get there. Good job!"
Seeking help	"You need to learn how to do this by yourself."	"You tried hard. Then you asked your sister for help with the math. Great!"

***When offering tips for improvement, give your high expectations and your belief that your son or daughter can do it.***

### Tip #2: Feed the Brain!



#### Food

The brain is the biggest eater in your body. It burns about one-third of the food your body uses. Eggs, nuts, and fish are some of the best brain foods.



#### Sleep

The teen brain needs 8-9 hours of sleep each day to run well. When youth don't get enough sleep, they have trouble remembering and learning things. In fact, studies show that test scores are one-third lower for tired youth compared to rested ones.



#### Exercise

The brain works better when the body gets regular exercise. With exercise, the brain actually grows new cells and learns more easily.



#### Challenge

When the brain is challenged, it builds thicker connections between brain cells it just used. The thicker the connections, the faster and the easier it is to do the task.

### Tip #3: Focus!

It is hard for the brain when different kinds of information enter at the same time. The brain will have more trouble saving and finding the information later. Support your youth to avoid texting or watching TV while doing homework.