



This sample translation features the foreword and introduction of the book, the first of the ten secrets, Sleeping, from the first part of the book, aimed at the parents, the introduction of the second part of the book, and the first of the ten secrets, Sleeping, from the second part of the book, aimed at the child.

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# FOREWORD

In this book I describe ten tips which have been proven to help with the brain development of children. A good brain development enables children to develop better on a social, emotional, cognitive, and mechanical level. I have collected the scientific knowledge behind these tips through the years and I have used fragments while writing my others books, like *The Makeable Brain* and *Train Your CEO Brain*.

These so-called golden tips in this book are specifically aimed at children. They are very effective and applicable by all. Together they form the SUPERBRAIN Secret. I have put the tips in an order in which they are easy to remember. And I have deliberately chosen for short text fragments, making it easy for anyone – whether you like to read or not – to digest this important knowledge quickly. And the theory is supported by the beautiful illustrations by Leendert Masselink.

The SUPERBRAIN Secret consists of two parts. In ‘A Good Development of the Children’s Brain’ I explain everything about the development of the brains of children. This part is marked with a little lock, referring to the unlocking the knowledge. I answer questions like:

- What do our brains do?
- How and why do children’s brains develop?
- Can you influence this development?
- What is the importance of the environment of this development?
- How important are you for that development?
- And what exactly do you have to do to support the development of the brain of your children?

We learn that what we do and what we expose our children to, has a great influence on the development of their brains, and in this way on the development of their skills, possibilities, and lives. With clear examples I will explain what we can instantly, daily, and really do to help children in this development.

In the second part of this book 'Bonne and the SUPERBRAIN Secret', I have incorporated the ten tips of the SUPERBRAIN Secret in a bedtime story on Bonne's daily activities. This story features a key, referring to applying the knowledge that has been shared in the first part of this book. Bonne is a name for both girls and boys and means 'good future'. In the story, Bonne builds on her good future with the people around her by developing her brain. You can read Bonne's adventures to your children when their active vocabulary has developed somewhat, giving them a playful way to learn what benefits their development. I have added questions you can ask your children to start a conversation about behavior which assures a good development of their brains, and about the things that play an important role in the daily lives of the child.

If you first want to read more background information on the development of children, their brains, and the ten golden tips featured in this book, you can best start reading 'A Good Development of the Children's Brain'. But you can also skip this part and go straight to the bedtime story 'Bonne and the SUPERBRAIN Secret'.

The information in this book helps parents, family, guardians, teachers, policy makers, experts, and anyone who plays an important role in the lives of our children, to support children with a healthy and happy growth. This is important, not only for the present, but also for the future. And not just for them, but for us all.

# A GOOD DEVELOPMENT OF THE CHILDREN'S BRAIN



Before I explain to you the ten tips of the SUPERBRAIN Secret, I will first tell you something about the development of the children's brain.

## **What do brains do?**

Your brains determine what you can do, feel, and achieve. And they also determine for a large part how you will develop. So, the brain and their development are very important in building someone's possibilities, happiness, and future.

At birth, the brain of a child weighs about 350 kilograms, about the weight of one and a half package of butter. After six months, they weigh about 750 kilograms, the equivalent of three packages of butter. Around the first birthday, the brain has grown to 900 kilograms, and when the child has reached the age of six, the brain weighs about 1125 kilograms. An adult brain weighs a kilo and a half, six packages of butter. Obviously, the brain of children grows a long time. Fortunately, because this increases their chances on a good development.

## **How do brains increase in weight?**

Your brains exist of braincells (Neurons) which are connected. They are linked with some sort of tentacles that are hooked onto these cells. The tentacles are called Axons and Dendrites. You can look at these tentacles and

the links they form between the cells like small pathways through which information can be transmitted from one cell to another. The points where information is being transmitted, we call Synapses. Every braincell has some 2,500 links when we are born, but this number grows rapidly, because at age three, every braincell makes about 15,000 connections. Because you grow so many links while you are young, you can learn a lot in this period.

Surrounding the tentacles of the braincells is a greasy matter, called Myeline. This stuff increases the information transmission through the pathways between the braincells. The weight of a children's brain increases because the number of cells and the amount of links between the cells grows, and because the greasy matter becomes more and more heavy.

### **Can the brains of children change?**

Early in life, the brain forms many connections. But something else of importance also happens. A lot of these connections are being cut. Links disappear. This is a process we call Pruning. And what is cut, partially determines how the brain will develop. And the disappearance of these connections is not a negative process, it doesn't hurt a bit. And it resembles the clipping of a rose bush; the things you cut, don't develop further, freeing up space and energy for other branches to develop.

When a child grows, a lot of braincells and connections are added in the brain, and a lot of connections are lost again. This process of forming new pathways and cells, and the strengthening, weakening, or cutting of these paths, continues your whole life, but happens most when you're young. We call the possibility of your brain to change, or restructure, Neuroplasticity. How the brain changes, determines how they form, and how your brain forms

determines what a child can do, feel, and achieve, and how it develops. So, it is very important that the brain develops in a healthy way.

### **What is the importance of the environment of the development of the brain and skills?**

A hundred years ago, we didn't know that much about the Neuroplasticity of the brain. Most people thought that the form and the mechanics of the brain were fixed shortly after birth. People assumed that we had little influence on the brain development of a child. Luckily, we know more today, and we can use this knowledge. The brains of children can be influenced by internal and external stimuli.

Some developments in the brain happen without any external influence. We call this process 'experience-independent' Neuroplasticity. Not much is needed for this form of development, it almost happens automatically. Some structure in the brain exist of a few layers, and the development of some of these layers is an example of development through experience-independent Neuroplasticity. Like in the Thalamus, a structural layer that is important to transmit information to other parts of the brain, among other things.

For other developments in the brain, we do need external influences. One of these forms is called 'experience-expected' Neuroplasticity. Most children learn the skills we think are normal, through experience-expected Neuroplasticity. Learning to speak and understand a language is a good example of these skills. Children have to be exposed to various aspects of language at a certain age, during a critical period, to develop brain networks that are language-related. By developing these brain networks, the child is enabled to learn to understand and speak the language. If children are not, or not enough, exposed to language in this critical period, the brain will not

develop these skills enough and the child will miss the chance to develop normal language skills.

Experience-expected Neuroplasticity allows a child, among other things, to learn how to speak and understand a language. Which language and how well the child will speak it, is determined by yet another form of Neuroplasticity: 'experience-dependent' Neuroplasticity. Experience-dependent Neuroplasticity enables that what you do and experience, shapes your brain and skills in specific ways. If you are exposed to English, the networks in your brain will be influenced in such a way that you can speak English. If you are exposed to Spanish, they will be formed to allow you to learn how to speak Spanish. The more you are exposed to a certain language, and the more you are trained in listening to, talking, reading, and writing, the more fluent you will be in this language. And this goes beyond language, and also applies to football, drawing, playing piano, and math.

And the same goes for cursing and empathy, for being rebellious and creative, and so much more. The environment in which a child grows, and the things it is exposed to, are of the utmost importance for the development of the brain and the development of all kinds of skills.

### **How important am I for the development of a child?**

Our knowledge of Neuroplasticity teaches us an important lesson. It is not just the brain that determines what someone can do, feel, and achieve. The opposite is also true. What you do, feel, and achieve, determines how the brain develops. Brain and skills develop in an interplay between the genes and what someone does and experiences. In the book *The Makeable Brain* I summarized this as 'your brain creates your being, but your being also creates your brain'. In other words: the brain determines what you do, feel,

and achieve, and what you are exposed to, but what you do, feel, and achieve, and what you are exposed to also determines how your brain develops. And that process influences what you can do, feel, and achieve. It is a continuous of being and becoming, and this process enables someone to continue to grow.

If you take some time to think about this, it becomes clear why parents, guardians, and everyone around children are so important in their lives. What we do, what we expose them to, influences the development of their brains, and the development of their skills, abilities, and lives, on a daily basis.

So, we can widen the sentence 'your being creates your brain', if we focus on the development of children, to 'our being creates their brain, and therefore their being'. This sentence shows that we have a huge responsibility, and that there are great opportunities. The brain are formed under the influence of good things, like giving attention, explaining things diligently, and cuddling, but also influenced by less positive aspects, like being made fun of, being impatient, and ignoring the child.

How a child develops, is determined by the interplay of (genetic) aptitude, environment, and the how you treat the child. You can make sure that the child grows up in an environment that empowers the development of feeling, thinking, and doing, and giving them a healthier and more happy adulthood. It is clear when we answer the question 'how important are you for the development of your child?', that you are very important for the development of the brain, skills, and possibilities of a child.

Whether this is at home, at school, in the neighborhood, or at youth sports. Whether you are a parent, family member, guardian, teacher, policy maker, babysitter, or child expert, everyone that has a role in the life of a child, forms

the brain of children, and is so very important to help children with a healthy and happy development.

**What can I do to support the healthy brain development with my child?**

Now that we know more about the importance of brains, the development of children's brains, and our role, we can continue to the ten golden tips, that have been proven to help support the development of children's brains in a healthy way. Together, they form the SUPERBRAIN Secret. All these tips have a positive influence on the development of the brain, and the development of the feeling, thinking, and doing of children. I will explain each tip one-by-one. And you will see that the order in which they are presented, will help you to remember all ten.

# SLEEPING



The first tip is sleep. Sleep is very good for the development of the children's brain. If children sleep well, they learn better and are more joyful. New-born babies need up to 14 to 17 hours of sleep each day. Toddlers and preschoolers still need a lot of sleep. And even older children need more hours of sleep than most parents think they need. The table below shows how many hours of sleep children and adults need each day, according to their age. Some children and adults will need some more hours and others less, but these numbers are a good indication.

	Newborn	Baby	Toddler	Preschooler	School going	Teen	Adolescent	Adult	Senior
Age	0-3 Months	4-11 Months	1-2 Years	3-5 Years	6-13 Years	14-17 Years	18-25 Years	26-64 Years	65+ Years
Hours	14-17 Hours	12-15 Hours	11-14 Hours	10-13 Hours	9-11 Hours	8-10 Hours	7-9 Hours	7-9 Hours	7-8 Hours

But it is not just the number of hours of sleep that is important, what you do before children go to bed is equally essential. Young children sleep better with a fixed going to bed ritual. Usually, this ritual exists of four parts:

- Before going to bed, you feed your child, or when they are old enough they receive a healthy snack.
- Your child takes a bath or is being washed, and you brush their teeth.
- You talk to your child, read them a book, or sing a lullaby together.
- You wrap things up with hugs and kisses, and you give your child a cuddle toy to hold, you tuck in, turn off the lights, and make sure that the surroundings are calm.

In short: something to eat, hot bath, brushing teeth, read a little, cuddle toy, tuck in, kisses, lights out, and sleeping in a calm environment. If your child experiences troubles getting to sleep despite all these steps, take a look at websites with bedtime hints and solutions.

## INTRODUCTION TO THE SECOND PART



This is Bonne. Bonne is still a toddler, but she can already do a lot of things. She can laugh, cry, eat, drink, walk, talk, sing, and build towers. She can put on her own socks and the other day she made a drawing with lots of pretty colors.

And there is a lot that Bonne cannot do yet. But she will learn it all. She will learn how to ride a bicycle, read, dance, write, play football, and much more. She will learn something new every day. And each day she can do more and more.

Bonne can learn so much because she has brains in her head. Her brain looks like a large walnut and it makes sure that Bonne can feel, move, and think. And the allow Bonne to learn all sorts of things. The brain grows and if they grow healthy, Bonne can learn more. But the growing up doesn't happen by itself. Bonne needs her momma, daddy, grandpa, grandma, aunt, neighbors, sitter, teacher, and many more people to help her.

If they read to Bonne a lot, and speak to her a lot, she will understand more and more, and Bonne will then learn how to speak herself. If they play football with her a lot, she will learn how to play football better and better. And by doing craftwork with Bonne, she will learn how to cut and paste better. And if they yell a lot to Bonne, she will learn how to yell loud. Some things make her brain stronger, and other things don't. Of course you would like to know which things will make Bonne's brains stronger.

How do you find out? There is a professor who can tell you. The professor has read a lot of books and then thought long and hard. So hard, you could hear here brain cracking. When the cracking stopped, she made a list of ten things that make sure that the brain of children grows stronger. She called her list, the SUPERBRAIN Secret, a secret to create super strong brains.

The SUPERBRAIN Secret will not only make Bonne's brain stronger, but also your brains. With strong brains you can learn good and you feel happy. Do you want to know the SUPERBRAIN Secret? Take a look at the list of the professor.

1. Sleeping
2. Using fresh air
3. Pleasant talking
4. Experiencing
5. Routine
6. Being active
7. Reacting
8. Affection
9. Imitating
10. No stress

Hmm, if you look at the list of the professor, it still feels like a secret. What does the professor mean with all these words? If you read further, you will understand the SUPERBRAIN Secret better.

## SLEEPING



The first thing on the professor's list, is sleep. Sleep is very good for Bonne's brain. If she sleeps well, she can learn better, and she will be more happy. When babies are born, they need to sleep almost the whole day. Bonne sleeps most at night, but she also goes to bed at noon.

If Bonne is a little older and goes to school, she won't need a nap in the daytime anymore. But she still has to go to bed earlier than daddy and momma. Grown-ups need less sleep than children. Bonne sleeps better if she does the same things each time she goes to bed. She has a cup of warm milk, splashes herself clean in bath, and brushes her teeth with daddy or momma. Then she gets into bed. Her bear always goes with her. One more story, a big kiss, under the blankets, and close your eyes.

- If you sleep, your brain becomes stronger!
- How old are you? How many hours do you need to sleep each day?
- What do you do before you go to sleep?
- Do you like to sleep?