

# Comprehensive Behavioral Intervention for Tics (CBIT)





In 2001, the Tourette Association of America's Behavioral Science Consortium tested and published the first large scale study showing that a non-medication treatment can effectively reduce tic severity. This treatment is called the Comprehensive Behavioral Intervention for Tics or CBIT (see-bit). The development of this new therapy brings great hope and excitement to the TS community. The purpose of this brochure is to introduce you to CBIT and common questions about the treatment, discuss the effectiveness of CBIT, and describe how to find a trained CBIT provider.

## What is CBIT?

CBIT is a non-medicated treatment consisting of three important components:

- (a) Training the patient to be more aware of his or her tics and the urge to tic.
- (b) Training patients to do competing behavior when they feel the urge to tic.
- (c) Making changes to day to day activities in ways that can be helpful in reducing tics.

Many of these strategies are already commonly used in the management of TS symptoms. Many adults with TS report that they have come up with strategies similar to CBIT to manage their tics. CBIT takes the most effective concepts and blends them with strategies that aid people in learning the techniques quickly.

## How do you learn CBIT?

CBIT is a highly-structured therapy administered once a week by a therapist. The standard treatment is eight sessions over ten weeks, but it can be adjusted to meet the needs of the patient and his or her family. The first step in CBIT is to teach the patient to familiarize himself or herself with the tics and the urges felt prior to ticcing. The next step is to teach the patient a competing response that can be used when the patient notices the urge to tic or notices doing the tic itself. The competing response is a specific behavior or movement that makes the tic more difficult to accomplish. This critical step helps to reduce, and in some cases, eliminate the tic. For example, someone exhibiting a frequent throat clearing tic may be taught to engage in slow rhythmic breathing when the urge to perform the tic arises. Tensing the neck may be used for a head-shaking tic. The patient is taught to recognize the urge and begins tensing the head or neck muscles as a competitive response.



Certain environments, situations or reactions can trigger tics and make them worse. This is where the functional intervention (FI) step is implemented. The goal of FI is to identify the day-to-day situations that worsen tics and change them in

a way that makes tics less likely to happen. For example, someone whose tics become more frequent doing homework or before a presentation at work would be taught to manage his or her stress before and during these situations. Likewise, a person who starts ticcing more when sitting for long periods of time, may be encouraged to take structured activity breaks throughout the day.

## **We have always been told that TS is a neurological disorder and that tics are involuntary. If this is true, then how can CBIT work?**

There is no question that tics are neurological in nature. However, tics are often also extremely sensitive to the environment in which they occur. Every person with TS has experienced certain situations that make his or her tics worse. Similarly, most people with TS know that other situations or activities help calm their tics. CBIT attempts to help children and adults familiarize themselves and identify environmental factors that make their tics worse. CBIT also teaches skills on how to create environments that are more stable, predictable and easily manageable.

## **Since CBIT works, does this mean that people with TS are able to suppress their tics?**

People with tics can often temporarily suppress their tics, but this does not mean that they can control them at all times. Voluntary suppression is stressful and is often exhausting, frustrating and may increase irritability. CBIT is not the same as voluntary tic suppression. CBIT teaches people with TS a set of specific skills they can use to manage their tic urges or behaviors without having to use voluntary suppression. The therapy does require concentration and practice learning competing responses. CBIT encourages the practice of specific competing responses developed with their therapist. The competing response performed in a calm focused manner can decrease tics and allow for the patients to feel more in control.

**I've been told to ignore my child's tics because making him more aware of tics makes them worse. Won't CBIT make tics worse?**

Tics usually get worse with stressors like calling extra attention to them whether at home, school or in the workplace. The goal of CBIT is not to make children and adults more self-conscious, but rather make them more self-aware of their tics. As people with TS become more self-aware and understand what TS is, they often relax, feel more empowered and self-confident – these emotions are all associated with decreased tics, not increased tics. In CBIT, the goal of self-awareness training is beneficial and helps the patient understand what makes their tics better or worse.



**I've heard that when people with TS try to stop their tics, it will make other tics worse or will cause a rebound in tics after the efforts to stop have ended. Won't CBIT cause these problems, too?**

CBIT does not teach voluntary suppression, but rather teaches techniques to control other behaviors that are incompatible with ticcing until the urge to tic or the tic decreases or goes away. Practicing behaviors that are incompatible with ticcing is not voluntary suppression. Studies show that these strategies used in CBIT do not cause current tics to worsen or new tics to emerge. Rather, new tics or worsening of current tics is part of a TS diagnosis regardless of the treatment and it is not a side effect of CBIT.

**Doesn't CBIT simply lead to the competing response becoming a new tic?**

Patients with TS commonly observe that they develop new tics and that old ones fade away. This is normal for TS. Patients are sometimes concerned that doing a competing response will become a new tic. Fortunately, there is no evidence that this occurs. It is not commonly reported by patients and has not been observed in the research.

**How effective is CBIT for somebody with TS?**

Large, multi-site, National Institutes of Health-funded studies show that more than half of the people who undergo CBIT will have significant reductions in tic severity and improved ability to function. Complete elimination of all tics and other TS symptoms does happen occasionally in CBIT. CBIT is not a cure for TS but a tool that helps individuals better manage their tics and improves their quality of life.

## Is CBIT for everybody who has TS or tics?

It is important to understand that not everyone will benefit from CBIT. Teaching this technique to children with untreated ADHD may be more difficult because of problems with focusing, impulsivity and low frustration tolerance. Likewise, any other psychiatric or social problem that gets in the way of participating in treatment may make CBIT more difficult. CBIT can be used without treating co-occurring conditions, but we recommend patients address any co-occurring conditions with an evaluation. These conditions or symptoms may hinder their ability to practice CBIT.

## Is CBIT easy to do?

CBIT may seem like a simple technique and therapy, but be aware that it takes effort and time for CBIT to be effective, like any new skill. CBIT does become easier as time goes on.

## Should CBIT be used as a first line of treatment, used with medications, or if I use medication can I stop using medication?

This decision must be made with the appropriate healthcare practitioner. CBIT is becoming more widely available and may be used as a first-line treatment when there is concern about medication use and side effects. It is not recommended to stop or reduce tic medications before starting CBIT unless this strategy has been recommended by the patient's prescriber.



## Once mastered, will CBIT last a lifetime?

A recent study showed that 87% of participants who thrived with CBIT continued to do well six months after treatment. Remember CBIT is not a cure; it is a management strategy. Patients learn a set of management skills that can be applied for the rest of their lives as needed.

## Since CBIT is a behavioral treatment, does that mean I should punish my child for having tics and reward him for not having tics?

For over 30 years, professionals have rejected the use of punishment procedures for any problem. CBIT does not employ or advocate punishment for tics; just the opposite. Punishing a child for ticcing or for not suppressing his/her tics is ineffective. Scolding a child, raising one's voice, or taking away privileges because he/she tics is not helpful and will likely create distress and worsen tics. It is also unhelpful to reward children for not having tics.



One of the great joys of helping children learn CBIT is sharing in their excitement when they really master the techniques and begin to experience a reduction in tic symptoms. To get to that point, we want children to practice their competing response and we want parents to reward and support their child for their efforts (not tic reduction). CBIT may be a challenge to learn, so parental and professional support and positive feedback for practicing their CBIT management skills can be critical in helping the child early in treatment.

### **What should I do if my child refuses to do his CBIT exercises?**

How many of us always do what is in our best interest – exercise, eat right, get a good night's sleep, etc.? Doing something new for oneself is not always easy. Some kids with TS might really struggle to learn CBIT. Recognizing how hard it is for them, helping them keep their spirits up, motivating them to keep trying, are all roles parents can play. Encouraging children for doing their CBIT exercises is a much better way to go.

It is also beneficial to educate others, teachers, school personnel and employers about CBIT so that they can be supportive of these efforts and help to create and maintain the positive environment necessary for CBIT to be most effective.

### **Where can I go to have CBIT performed?**

CBIT can be taught by a trained clinician, including psychologists, doctors, nurses, social workers, or other therapists. As with any treatment, the training and skill of the clinician are critical to outcome. It is our recommendation that only therapists who have been trained in the principles of cognitive behavior therapy and have received specific training in CBIT should provide this treatment. Unfortunately, right now, few clinicians have been trained in CBIT.

We are working to establish training programs in CBIT across the country for professionals who work with TS individuals and their families. Until this is done, there will likely continue to be a shortage of therapists trained in CBIT. Some professionals who are not well-trained in CBIT will try to do the treatment, and it is important to understand that their results may not be as good as the results obtained from a trained and experienced CBIT clinician. We encourage you to select your therapist carefully and ask about their training in CBIT.

Recognizing the critical shortage of trained behavioral therapists for treating Tourette Syndrome (TS) and tic disorders, the Tourette Association has established the Tourette Syndrome Behavior Therapy Institute (TS-BTI). Developed by members of the Tourette Association Behavioral Science Consortium, the program is designed to help increase the number and availability of therapists trained in CBIT. Programs are held at regular

intervals in different locations around the country by our TAA TS-BTI Faculty. Upon completion of the program and consultation sessions, participants will be listed on the CBIT therapist referral list maintained by the Tourette Association. To learn more or register for a TS-BTI program, please contact Denise Walker at [Denise.Walker@tourette.org](mailto:Denise.Walker@tourette.org) or by calling 888-4TOURET, ext. 222.



## Summary

CBIT is a powerful technique that has been demonstrated to reduce tic severity, and reflects a modern understanding of how the brain can be shaped by the environment. The Tourette Association and the Association's Behavioral Science Consortium is committed to communicating clearly what this research means so the treatment will be used correctly and effectively.



## REFERENCES

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## ABOUT THE TOURETTE ASSOCIATION BEHAVIORAL SCIENCE CONSORTIUM

The Tourette Association's Behavioral Science Consortium was established in 2001. Members are previous recipients of Tourette Association grant awards who were brought together to enhance progress in this field by testing CBIT. The mission of the Behavior Science Consortium is to develop, test, and disseminate evidence-based behavioral treatments for children and adults with Tourette Syndrome.

## ABOUT THE AUTHORS

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This publication is intended to provide information. Families are advised to first consult a physician concerning all treatments and medications.

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