

Nail Biting Research

<http://www.xovain.com/nails/quit-nail-biting-in-10-step>

What this article does well: The author really humanizes the story and it connects with the audience because they have the same problems. She also says "I am not special. I do not have magical abilities." It also has parts that are "girl oriented".

<http://www.wikihow.com/Stop-Biting-Your-Nails>

Methods covered: 1) bandages on nails 2) "save one nail at a time" 3) keep hands and mouth busy---hand techniques and mint/gum for mouth/etc. 4) Biting inhibitor polish 5) Nail polish/gloves 6) Maintain healthy nails (manicure - diet - etc.)

http://www.huffingtonpost.com/2014/08/18/nail-biting-bad-for-you_n_5675467.html

Why nail biting is bad -- introducing bacteria from hands (doors, keyboard, etc.) into mouth. Infection of fingernails, spreading warts.

Rochelle Torgerson, M.D. Ph.D, mayo clinic is quoted about how it can increase risk of infection of nails (paronychia)

<http://www.webmd.com/beauty/nails/stop-nail-biting-tips>

<http://www.psychologytoday.com/blog/intense-emotions-and-strong-feelings/201205/reforming-the-nail-biter>

But therein lies the problem: habits that bring momentary comfort are difficult to relinquish.

However, like a dog that is willing to endure the shock of an electric fence in order to chase a rabbit, the nail biter usually chews right through any evil-tasting stuff. Dreadful as it may sound, pharmaceuticals such as clomipramine and desipramine (tricyclic antidepressants) have been used in the treatment of severe nail biting although using medications was not shown to be efficacious in most cases (Leonard, H.; Lenane, M.; Swedo, S.; & Rettew, D., 1991).

Non-removable reminders, such as wristbands designated to be a constant cue to the nail biter of his resolve to quit, have been used to control nail-biting but, unfortunately, they were found to be

no more effective than aversive techniques (Koritzky, G. & Yechiam, E., 2011). In another study, participants kept self-monitored records of biting responses and for six weeks they were each seen individually by someone who measured their nail lengths (Adesso, V.; Vargas, J.; & Siddall, J., 1979).

"Ten friends technique"

<http://scicommbobulate.blogspot.com/2012/04/once-bitten-twice-shy-how-i-finally.html> Really well rounded and written article that covers a lot of the overall information

<http://www.trich.org/treatment/article-related-habits-penzel.html> Fred Penzel, PhD is the author.

" Therapy for these disorders would consist of Habit Reversal Training, a three-step process which teaches you awareness of your habits, how to relax, focus and center yourself, and to perform a competing and opposing muscle response. (I have described this technique in a previous TLC InTouch article on cognitive/behaviors therapy for Trichotillomania, which I'm sure you can get copies of.) It can be extremely useful if practiced daily and stubbornly, as it must become as automatic as the habit you are aiming to eliminate. These are stubborn problems for two reasons. First, you have probably rehearsed the unwanted behaviors hundreds or even thousands of times. It is important to accept that they will not simply be overcome in a few days or weeks. Second, you are fighting the fact that they feel good to do, and provide much short range satisfaction and soothing. It takes time and a good deal of effort to master, but I believe it is worth it. Research shows it to be an effective technique."

http://www.slate.com/articles/life/family/2008/02/bite_club.html Mother talks about her own nail biting and her 5yr old son biting as well

<https://www.youtube.com/watch?v=kPDnYSDSrnw> 660,000 views on youtube - nail painting channel w/2mil subs - 1) nasty tasting polish 2) fake nails 3) cuticle cutter or cuticle cutter 4) nail art - self promotion of the channel 5) boredom/anxiety

<http://www.cvs.com/shop/bite-it-the-easy-way-to-stop-nail-biting-skuid-103792> - nail biting polish example (a lot of positive reviews, real?)

<http://jamesclear.com/three-steps-habit-change> - ~1000 shares. Examples of how a habit works and good image. "Make it so easy you can't say no." "Lasting change is product of daily habits, not once-in-a-lifetime transformations." Flossing just 1 tooth example. CELEBRATE YOUR SUCCESSES.

<http://charlesduhigg.com/need-to-break-a-bad-habit/> Infographic -helpful!

<http://zenhabits.net/the-habit-change-cheatsheet-29-ways-to-successfully-ingrain-a-behavior/>
We are what we repeatedly do. Excellence, then, is not an act, but a habit. - **Aristotle**

7. Don't start right away. In your plan, write down a start date. Maybe a week or two from the date you start writing out the plan. When you start right away (like today), you are not giving the plan the seriousness it deserves. When you have a "Quit Date" or "Start Date", it gives that date an air of significance. Tell everyone about your quit date (or start date). Put it up on your wall or computer desktop. Make this a Big Day. It builds up anticipation and excitement, and helps you to prepare.

13. Become aware of self-talk. You talk to yourself, in your head, all the time — but often we're not aware of these thoughts. Start listening. These thoughts can derail any habit change, any goal. Often they're negative: "I can't do this. This is too difficult. Why am I putting myself through this? How bad is this for me anyway? I'm not strong enough. I don't have enough discipline. I suck." It's important to know you're doing this.

27. Engineer it so it's hard to fail. Create a groove that's harder to get out of than to stay in: increase positive feedback for sticking with the habit, and increase negative feedback for not doing the habit. [Read more on this method.](#)

1. When negative feedback outweighs positive feedback, habit change fails.
2. To make the habit change successful, positive feedback has to outweigh negative feedback.
3. **The solution:** increase positive feedback and/or decrease negative feedback until the ratio favors the habit change. **CREATE YOUR OWN POSITIVE FEEDBACK**

Nail Care:

<http://www.webmd.com/beauty/nails/caring-for-your-cuticles>

<http://www.webmd.com/beauty/nails/more-beautiful-nails-a-dozen-tips>

<http://psychcentral.com/lib/7-steps-to-changing-a-bad-habit/00020119> - article designed for "headline reading" ---just read the bold list and nothing else

<http://99u.com/articles/7230/hacking-habits-how-to-make-new-behaviors-last-for-good> -2000+ shares --- “Brains are in the business of gathering information and steering behavior appropriately. It doesn’t matter whether consciousness is involved in the decision making. And most of the time, it’s not.” - David Eagleman

“For a habit to stay changed, people must believe that change is possible. And most often, that belief only emerges with the help of a group,”

*If you want to get rid of a bad habit, you have to find out how to implement a healthier routine to yield the same **reward**.*

<http://www.lifehack.org/articles/communication/9-daily-habits-that-will-change-your-life.html> Really useful article - reads as a headline article but the other text is useful too. Especially the stuff around morning routines and preventing the online "inputs" specifically by setting times for yourself to do those things.

<http://www.artofmanliness.com/2012/11/20/power-of-habits/> -4000 shares in depth on the cue-habit-reward sequence - cites a study with mice

<http://www.forbes.com/sites/learnvest/2014/02/04/5-tricks-to-hack-your-way-to-better-life-habits/> This reminds me of Tim Ferriss idea - Create If->Then Statements with your life. Covers

multiple habit changing books. Talks about the similar idea: make the changes so easy that it's harder to NOT do them.

<http://greatist.com/health/hack-your-brain-turn-bad-habits-good-ones> 2000 shares - Dr. Michael Roussell, PhD. - Can't erase habits, only overwrite them. Replace routine---keep cue and reward

Nail Biting Studies

Studies have found that between 28% and 33% of children between ages 7 and 10 years, 44% of adolescents, and 19%–29% of young adults engage in nail biting

Nail biting usually occurs in combination with other problematic body-focused repetitive behaviors such as hair pulling disorder and skin picking disorder. Nail biting in adults is underrecognized because patients often fail to seek help due to feelings of shame and embarrassment, and, consequently, the disorder has received little attention in the psychiatric literature.

In most cases, nail biting seems to be only a cosmetic issue, and no treatment is required. But, in severe cases, untreated nail biting can result in a host of complications such as severe damage to the cuticles and nails, paronychia and secondary bacterial infection, dental problems, and temporomandibular dysfunction. Studies on drug treatment of nail biting are sparse and limited to antidepressants and *N*-acetylcysteine.

(Sharma & Sommerdyk, 2014)

Clomipramine appeared to be an effective, safe and well-tolerated agent to control symptoms of OCD and onychophagia in our first patient. Serotonin re-uptake inhibitors (SRIs), such as clomipramine or sertraline (as was reported in the second case), which are used in the treatment of OCD, may also be considered a good treatment option in onychophagia. Other authors also considered SRIs as effective therapy for onychophagia (11, 17). In addition, SRIs were documented to be effective in other psychodermatoses, such as trichotillomania or body

dysmorphic disorder (18, 19). It has been suggested that pharmacotherapy is effective in approximately 60–70% of patients with onychophagia (11). On the other hand, behavioural therapy, including self-monitoring and habit reversal also resulted in a short-term reduction in nail biting behaviour (20).

(Pacan, Grzesiak, Reich, & Szepietowski, 2009)

In most cases, it is of cosmetic concern only; however, if not controlled, it can lead to serious morbidity (41). Complications of nail biting include damage to the cuticles and nails (21), dermatological problems of fingers such as melanonychia (32), self-inflicted gingival injuries and gingival swelling (7, 19, 28), dental problems such as increased incisal wear and apical root resorption (21, 26, 27). In addition, osteomyelitis has been reported in a phalanx as a result of chronic nail biting (39, 41).

Dentists and/or dental specialists are usually interested in dental and gingival problems as a result of chronic nail biting. However, the habit of nail biting can result in autoinoculation of pathogens and transmission of infection to distant body parts (40). For children with inadequate and poor toilet hygiene, enteric bacteria can pose a potential threat and danger by penetrating the body via the mouth as a result of nail biting; so they can lead to various infections there.

(Baydaş, Uslu, Yavuz, Ceylan, & Dağsuyu, 2007) ← highly recommended

One potentially dangerous habit behavior that occurs in typically developing children is nail biting. At high rates, this behavior can result in undesirable consequences, including negative peer evaluation (Long, Woods, Miltenberger, Fuqua, & Boudjouk, 1999), bleeding cuticles, infection, and acute paronychia (skin infection), which may require surgical treatment (Silber & Haynes, 1992). Two conventional treatments for nail biting are habit reversal/competing response training (Azrin & Nunn, 1973) and aversion treatment (Vargas & Adesso, 1976). Despite empirical support for their effectiveness (Allen, 1996; Silber & Haynes, 1992), both treatments have

limitations. Habit reversal for nail biting typically consists of awareness training, competing response training, inconvenience review, social support procedures, symbolic rehearsal, public display, and nail-biting prevention training (Azrin & Nunn, 1976). Although maintenance of treatment effects is strong for habit reversal (Miltenberger & Fuqua, 1985), children may be less likely to implement treatment with integrity (Miltenberger, Fuqua, & Woods, 1998). Furthermore, despite evidence that habit reversal and competing response training can effectively treat habit behavior in children (Woods et al., 1999), treatment involved extensive training

(Zawoyski, Bosch, Vollmer, & Walker, 2014) -- url below

--- <http://bmo.sagepub.com/content/38/3/428.long> ← highly recommended

Baydaş, B., Uslu, H., Yavuz, I., Ceylan, I., & Dağsuyu, I. M. (2007). Effect of a chronic nail-biting habit on the oral carriage of Enterobacteriaceae. *Oral Microbiology and Immunology*, 22(1), 1–4. doi:10.1111/j.1399-302X.2007.00291.x

Pacan, P., Grzesiak, M., Reich, A., & Szepietowski, J. C. (2009). Onychophagia as a spectrum of obsessive-compulsive disorder. *Acta Dermato-Venereologica*, 89(3), 278–80. doi:10.2340/00015555-0646

Sharma, V., & Sommerdyk, C. (2014). Lithium treatment of chronic nail biting. *The Primary Care Companion to CNS Disorders*, 16(3). doi:10.4088/PCC.13101623

Zawoyski, A. M., Bosch, A., Vollmer, T. R., & Walker, S. F. (2014). Evaluating the Effects of Matched and Unmatched Stimuli on Nail Biting in Typically Developing Children. *Behavior Modification*, 38(3), 428–447. doi:10.1177/0145445514541615