

The Five-Step Battle Plan

An integrated, safe approach to getting rid of head lice

The Five-Step Battle Plan is based on a treatment program first developed by a group of entomologists in Israel to eliminate head lice on their own children. These entomologists, who spent a lot of time dealing with pesticides, were very concerned about the dangers of using pesticides on young children. And in Israel, permethrin was made available ten years before it was available in the US. Therefore, resistance began to develop there before it was recognized in the US.



The Five-Step Battle Plan incorporates an integrated approach, as recommended by the Harvard School of Public Health- "Success will likely depend on an integrated approach... combined with perseverance and a bit of levity." 2 Treat the entire family with the olive oil protocol.

Briefly, the Five Steps are:

1. Use a pediculicide (optional).
2. Apply olive oil treatment on days 1, 5, 9, 13, 17, 21. If you choose not to use a pediculicide, add day 2 to the above list.
3. Clean the environment.
4. Comb out the lice and nits.
5. Check for nits regularly.

What you will need going into battle or what really smart parents have on hand *before* they get head lice:

1. A great big bottle of the least expensive olive oil you can find. It doesn't have to be virgin; it doesn't have to be cold pressed.
2. A small plastic applicator bottle similar to the one used for applying color to the hair.
3. A good metal nit comb.
4. Covered elastic hair bands or hair clips to separate the hair.
5. Plastic shower caps.
6. Bandannas or bathing caps.
7. Towels.

Optional:

8. A pediculicide *if you choose to use one*. Check with your physician or pharmacist for the one best suited for each member of your family. Remember do not use anything containing Lindane (Kwell) or malathion (Ovide).

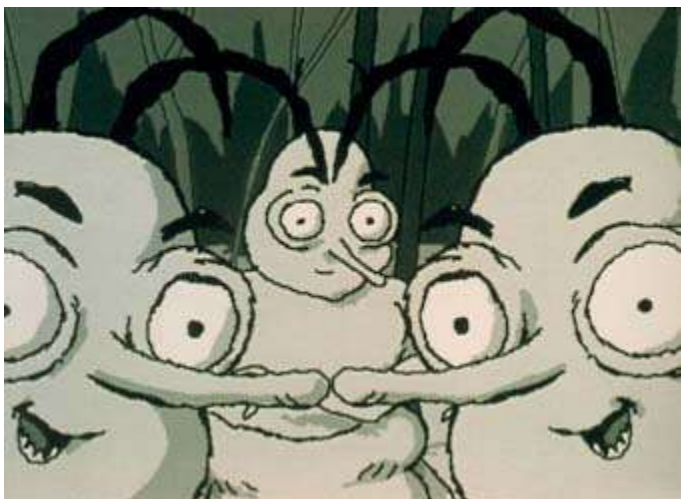
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9. [Vision visor](#) if you are visually challenged, you may want to consider getting one of these binocular magnifiers. They magnify 2 1/2 times at 8" and help you see the nits, while leaving your hands free to pick nits. They look like goggles and you can wear them with or without glasses. We find that wearing this gives us confidence in determining what we're seeing, especially since we are over forty.

What you *don't* need:

- **Louse sprays**--they're more harmful to your kids than the lice. The vacuum or a lint remover work better.
- **Electric nit combs.** They are expensive and must be used dry. They will not work with this protocol.

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Step one: Use an over-the-counter pediculicide.

This step is optional.

Remember, over the last several years, more and more evidence has come to light that head lice are developing resistance to pediculicidal products. This is not surprising since insects usually develop resistance to pesticides. It's just a matter of time. There's a reason why cockroaches have been around longer than humans and will probably be around long after we're gone.

Whether or not you choose to use a pediculicide is a personal decision that should be made in collaboration with your family physician. If you are uncomfortable using a pesticide, don't do it. You will still get rid of the lice. If, however, you feel compelled to do everything possible as quickly as possible to get the lice off your family's heads and out of your house, we feel it is acceptable to use an over-the-counter pediculicide once. So, do what you have to do, as long as it's not dangerous to you or your child. If you use olive oil you should be free of lice at the three-week mark, whether or not you chose to also use a pediculicide. You should no longer be contagious after the first olive oil treatment.

Check with your physician to make sure that you or your child do not have allergies that will react to the pyrethrins, derivatives of the chrysanthemum (or to whatever other pediculicide has been selected).

How to use a Pediculicide

1. If you choose to use a permethrin or pyrethrin product, first wash the hair with a good clarifying shampoo like Prell to strip the hair of any other substances. Then dry the hair thoroughly. Using a pediculicide on wet hair will dilute the product.

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2. Work at a sink, not in a tub or shower so the pesticide only goes on the child's head. Cover the child's eyes with a wash cloth and use a full application. Apply the shampoo or creme rinse to dry hair, directly onto the scalp and massage it through the hair and scalp thoroughly.
3. Using a timer, leave the pesticide on the head for the amount of time directed on the package and no longer. Wash it out and go ahead and use a regular creme rinse or detangler. The package of Nix says other products interfere with the "residual effect" of permethrin, but since the residual effect may not work, make life easier for you and your child by making the hair easier to comb through.

Step 2: The Olive Oil Treatment

For best results, the olive oil treatment should be done on days 1, 5, 9, 13, 17 & 21. If you choose to skip the pediculicide, add Day 2 to the list above. These treatment days have been carefully chosen to disrupt the life cycle of the louse and maximize your chances of eliminating all the lice. It is best to adhere to the exact treatment days to ensure successful completion of the program. However, if absolutely necessary, you may adjust the treatment days as long as you are treating every 3-4 days.

Using an [applicator bottle](#), part the hair and apply the olive oil directly onto the scalp. Massage it in thoroughly, making sure to saturate the hair and scalp. If your child is old enough, cover the head with a plastic shower cap and keep it in place with a bandanna or bathing cap to control the mess. If you use a bandanna, knot it at the top of the head where it won't interfere with sleeping. Don't worry if the cap or bandanna come off during the night. Leave the oil on for eight hours. With young children, it may be easier to treat during the day than at night.

You may want to use a terry cloth headband to absorb leakage.

Cover the pillow with a towel to protect the pillow.

And while your kids are asleep with the olive oil quietly working its magic, it's time to:

Step 3: Clean the Environment

This is one of the more controversial issues involving head lice.

Heads Up: Rule of Thumb: clean only slightly more than most people clean on a weekly basis anyway. You only need to do this once.

Put your brushes away and use combs until the infestation is over. Vacuum or use a lint remover anyplace where infested heads have rested. Don't forget your car seats. Use clean towels each time you wash the hair.

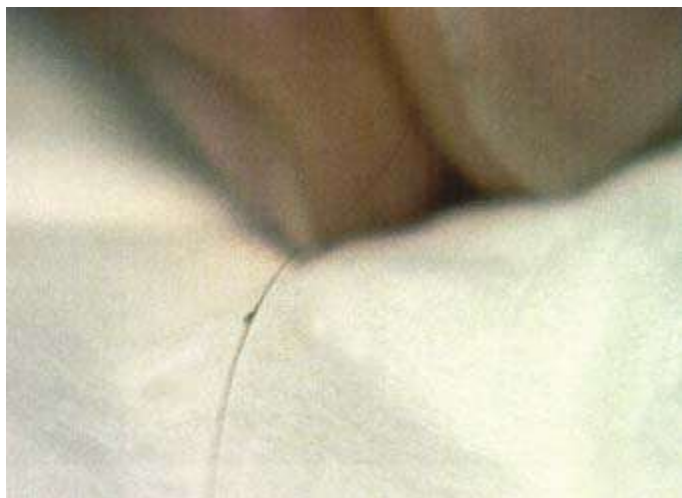
Use the clothes dryer on high for 30 minutes on any items that will not be harmed in the dryer. Anything else can be vacuumed or you can use a lint remover. Don't go crazy cleaning the

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environment, and don't strip your child's room of every beloved toy. You can see live lice or hairs and can remove them. Lice are not invisible.

Clean the environment once, then **stop**. Excessively and obsessive cleaning will not have any effect on head lice, but it will make you too tired to focus on the important areas-- your family's heads.

Step 4: The Comb Out--Comb Those Lice Right Outta Your Hair



Please note that combing out lice and nits is an extremely important step in eliminating an infestation--perhaps the most important step of all. The few times people using the Five-Step Battle Plan have had trouble eliminating the infestation, it can almost always be traced to a failure to do this step correctly. Bear in mind that the olive oil does not kill head lice the way a pesticide does, on contact. **Olive oil smothers the lice by covering holes in their sides called spiracles, through which the lice breathe oxygen.**

However, head lice can slow down their systems for a long time, much the way humans slow down their systems when they get hypothermia, as a survival mechanism. So, it takes a long time for the lice to actually die.

Heads Up: If you wash out the olive oil, without combing out the lice first, any lice that are not completely dead will resume activity. So, the combing is even more essential to remove adult lice than eggs.

After the oil has been in the hair for eight hours, leave the oil in the hair and comb out the hair with a regular clean comb to remove tangles. Then use a good [metal nit comb](#) to remove both nits and lice.

Heads Up: Olive oil must remain in the hair when combing for lice and nits.

Proper combing is a crucial step in eliminating head lice. The important thing to remember is that you are combing not just to remove nits, **but also to remove persistent nymphs and adults**. This requires two different combing techniques. Both should be done with the olive oil in the hair because some lice may be slowed down or paralyzed but not yet dead. Once the oil is washed off, the lice may revive and be more difficult to comb out. The point here is to **get the lice off the head before you wash out the oil**.

Olive oil also seems to loosen nits, making them easier to comb out, but only while the oil remains on the head.

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Combing Technique

To see the best technique for combing out lice watch the ["Nit Check Demo"](#), included free with this download or consider purchasing our video ["Head Lice to Dead Lice" on VHS](#) or [The Expanded "Head Lice to Dead Lice" on DVD with "Nit Check Demo" and FAQs](#)

Combing to remove bugs: comb along the entire scalp, with the comb in constant contact with, but not scraping, the scalp. Clean the comb frequently with a tissue.

Don't panic if you comb out a live louse or two. This does not mean that the oil doesn't work. It just means that particular louse didn't get covered sufficiently with the oil, or perhaps it was molting while you were oiling. (Nymphs or baby lice shed their outer shell three times while they are maturing. This interferes with the smothering technique and is the reason you must continue oiling at specific intervals over the entire three-week cycle). The fact that the louse is now off your child's head is the important part. A louse that is not at least partially covered in oil will easily avoid the nit comb.

Combing to remove nits: Pin hair into sections. Using your fingers, take a very thin section of hair. (See demonstration in the videos ["Head Lice to Dead Lice"](#) and ["Nit Check Demo,"](#) both included with this download) Starting right at the scalp, comb from the scalp all the way to the end of the hair, being careful not to scrape the scalp. Comb each section several times from different directions and clean the comb frequently with a tissue.

Some people insist, "Oh, I don't need to comb. I can just pick out the nits. It's easier." That's fine for the nits. But until you have combed out the live lice, they will continue to lay eggs. You need to get them off the head.

Heads Up: No comb, no matter how fancy or expensive, will remove all the nits.

You absolutely must go on to the next step and pick out any nits you've missed.

But before that you must:

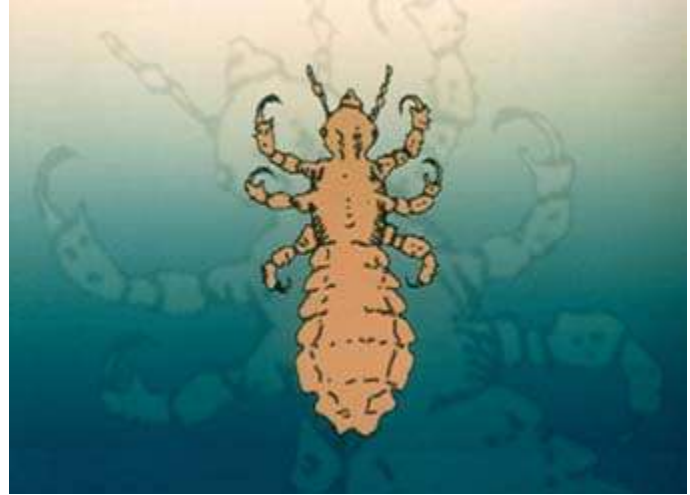
Wash out the oil

For the first wash, pour plenty of clarifying shampoo for oily hair directly onto the oily head. Don't wet the head until you have worked the shampoo through the hair. **Then rinse** and lather again. Olive oil is fairly easy to remove. Two to three lathers should do the trick. We have found that Herbal Essence Clarifying Shampoo for Oily Hair works well, but most clarifying shampoos will do the job.

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Remember, lice are killed by dry heat. So, dry the hair with a hair dryer, being extremely careful not to burn your child. Children have extremely sensitive scalps.

If your child complains, adjust what you are doing to accommodate your child's comfort level. If your child is comfortable, she will be more willing to cooperate, and everything will go much more quickly and smoothly. Don't forget, you will be repeating this procedure six times over the next three weeks. So make it pleasant and fun or you will be expending precious time and energy chasing the kids down before you even begin.



When the hair is clean and dry:

Step 5: Check for and remove any remaining nits



After the hair has been washed and dried, the hair should be rechecked and any nits that were missed in the combing must be manually removed.

Some organizations that publish louse literature recommend snipping out the hair with the nit attached, using a safety scissors. We find that this leaves a short hair which can easily end up with another nit on it (since new nits are usually laid right against the scalp) and very short hairs are harder to de-nit.

We don't recommend that you pull out the hair. (A nifty solution suggested by a male entomologist who confessed that he had never actually tried this on a real child). As you probably know, most children will simply not sit still for this. Again, we find that you get much better cooperation if you simply grasp the nit with your fingernail and pull the nit all the way off the hair. Deposit the nit onto an oily tissue, and when you're finished, flush the tissue. (Another male entomologist suggests combing the hair toward the scalp, like teasing, in order to "break the cement holding the nit in place." While this sounds good in theory, we somehow doubt he has tried this on an actual child either.)

Nit removal takes time. It's a great time to really talk to your child. After all, how often do you get this kind of concentrated time together? If you find you've run out of subjects to talk about, or if you're tense, try a book on tape. Books on tape are superior to videos because with videos, the child wants to look up at the TV when you need his/her head down.

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Many libraries and bookstores have an excellent selection of books on tape and it's a great way to experience the classics (or any book) together. Joan's whole family got addicted to books on tape while nitpicking.

If your child is tired, let her sit at a counter and rest her head on her arms. Many children sleep through long hours of nitpicking this way.

When you have finished removing the nits, be sure to wash your hands carefully and use a nailbrush. Lice can easily hide under nails.

If you have a badly infested child with waist length hair, you have a decision to make. Is it worth cutting the child's hair?

That's for you and your child to decide together. There is absolutely no reason to cut hair any shorter than shoulder length unless the child specifically wants short hair. However, getting nits out of waist length hair can be tedious and increases the chances of losing a nit in the hair. So, you and your child should make this decision together.

Timing of Olive Oil Treatments

We spent a lot of time and effort determining the exact days on which to repeat the olive oil treatment. In order to make sure we found the best possible combination of treatment days, without exhausting families by requiring that they do more than necessary. Our professional nitpicker, Mary Ward, worked with hundreds of families, trying different combinations of days. The goal, of course, was to ensure that every louse and nit was consistently eliminated by the three-week mark.

The problem is that no matter how careful you are, you will probably miss a few nits--everyone does. Many experienced school nurses and parents swear that nits are getting smaller over time. This would make logical sense, due to natural selection because the smallest nits would be more difficult to spot and eliminate, and therefore more likely to survive. But to our knowledge, no one has studied this phenomenon.

So, repeat treatments are timed to catch any louse that hatches from an unpicked nit, after it hatches and before it's old enough to lay eggs of it's own. Since it takes 8-10 days for a nymph (baby louse) to mature, we have found the following treatment days to be the most effective to eliminate an entire infestation:

Heads Up:

Repeat Steps 2 (the olive oil), 4 (the comb out) & 5 (the nit check) on the following days over the three week life cycle of the louse. If you do more than suggested you risk losing your family's cooperation. However, if your family can handle having their heads checked for nits every day the first week, it may increase the treatments' effectiveness. This is because with a heavy infestation, it's very easy to miss nits the first few times you go through the hair.

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Days: 1,5,9,13,17,21.

Add Day 2 if you chose not to use a pediculicide.

This protocol has been tested extensively by us on many lousy families and it has worked every time, when it is done correctly.

Now, before you decide that this is too much work, think about how much cleaning, combing and picking you did on that first day. *Don't trip at the finish line.* Too many folks get cocky and are convinced they've gotten every nit and louse and they can skip the last couple of treatments because it's not convenient. They're the ones who end up leaving work early three weeks later to pick up their kids and start the whole process all over again.

The Nit Picking Technique

([Watch the Videos](#) for the best techniques)

Divide the hair and pull one half of the hair into a ponytail. Check the other side by systematically moving around the head and pinning the hair out of the way as you finish each strand.

Take a thin strand of hair in your fingers and check both sides of the hair carefully for nits. Remember, the newest nits are smallest and, closest to the scalp. These are the most difficult to see. If your eyes aren't great, we recommend using a 'vision visor'-- a binocular magnifier that fits over your head like goggles, leaving both hands free. It magnifies 2 1/2 times at 8 inches.

You can also use a magnifying lamp but these can be expensive.

This is a critical time and the harder you work now; the easier it will be later. It is important to remove every single nit for several reasons:

- 1. So the nit won't hatch and lay more eggs.*
- 2. So you know if there are any live lice left on the head who are laying new nits.*
- 3. So, if your school has a no nit policy, your child can return to school.*

Continue doing the olive oil protocol every 3-4 days until you have been nit free for 10 consecutive days. If you are in the midst of a head lice epidemic at your school, consider sending the child to school with a little olive or coconut oil on the head and long hair in a French braid. Make sure any car pool drivers go over car seats with a lint remover between car trips.

Print out these instructions.

NOTE: Be sure to print out the [calendar](#).

Show the hilarious videos [now online](#), ["Head Lice to Dead Lice" on VHS](#) or [The Expanded "Head Lice to Dead Lice" on DVD](#) to your children so the whole family can watch a visual demonstration

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of the Five-Step Battle Plan and to teach your children how to avoid getting head lice during the next epidemic in their school.

Then read the 176 page book, ["Head Lice to Dead Lice"](#) to answer all your questions.

When you're finished, donate the book and video to your school or day care center. When you help the child sitting next to your child, you help yourself, too. If you wish, you may send an anonymous gift.

Do you need a Nit Picker?

If you live in the Boston area, you're in luck. Nit Wits, Nit Pickers with a sense of humor is now accepting clients. Call 617 -816-9487, email: nitwitsinfo@gmail.com

You will need to have completed one full olive oil treatment and comb out before they will see you, in order to avoid the possibility of passing live lice on to another client.