The antiviral, antibacterial, and antiprotozoal properties of lauric acid and monolaurin have been recognized for nearly three decades by only a small number of researchers: their work, however, has resulted in 50 or more research papers an numerous U.S. and foreign patents. Prof. Dr. Jon J. Kabara performed the original seminal research in this area of fat research. Kabara (1968) first patented certain fatty acids (FAs) and their derivatives (e.g., monoglycerides (MGs) can have adverse effects on various microorganisms. While nontoxic and approved as a direct food additive by the FDA, monolaurin adversely affects bacteria, yeast, fungi, and enveloped viruses.

Kabara found that the properties that determine the anti-infective action of lipids are related to their structure: e.g., free fatty acids & monoglycerides. The monoglycerides are active; diglycerides and triglycerides are inactive. Of the saturated fatty acids, lauric acid has greater antiviral activity than either caprylic acid (C-8), capric acid (C-10), or myristic acid (C-14).

Fatty acids and monoglycerides produce their killing/inactivating effects by several mechanisms. An early postulated mechanism was the perturbation of the plasma membrane lipid bilayer. The antiviral action attributed to monolaurin is that of fluidizing the lipids and phospholipids in the envelope of the virus, causing the disintegration of the microbial membrane. More recent studies indicate that one antimicrobial effect in bacteria is related to monolaurin's interference with signal transduction/toxin formation (Projan et al 1994). Another antimicrobial effect in viruses is due to lauric acid’s interference with virus assembly and viral maturation (Hornung et al 1994). The third mode of action may be on the immune system itself (Witcher et al, 1993).

Hierholzer and Kabara (1982) first reported the antiviral activity of the monoglyceride of lauric acid (monolaurin) on viruses that affect humans. They showed virucidal effects of monolaurin on enveloped RNA and DNA viruses. This work was done at the Center for Disease Control of the U.S. Public Health Service. This study was carried out using selected virus prototypes or recognized representative strains of enveloped human viruses. All these viruses have a lipid membrane. The presence of a lipid membrane on viruses makes them especially vulnerable to lauric acid and its derivative monolaurin. These initial findings have been confirmed by many other studies.

Research has shown that enveloped viruses are inactivated by added fatty acids and monoglycerides in both human and bovine milk (Isaacs et al 199 1). Others (Isaacs et al 1986, 1990, 1991, 1992; Thormar et al 1987) have confirmed Kabara’s original statements concerning the effectiveness of monolaurin.

Some of the viruses inactivated by these lipids are the measles virus, herpes simplex virus (HSV-1 and -2), herpes family members (HIV, hepatitis C, vesicular, stomatitis virus (VSV), visna virus, and cytomegalovirus (CMV). Many of the pathogenic organisms reported to be inactivated by these antimicrobial lipids are those know to be responsible for opportunistic infections in HIV -positive individuals. For example, concurrent infection with cytomegalovirus is recognized as a serious complication for HIV positive individuals (Macallan et al 1993).

Thus, it would appear imperative to investigate the practical aspects and the potential benefit of a nutritional supplement such as monolaurin (Lauricidin®) for microbial infected individuals. Until now few nutritionists in mainstream nutrition community seem to have recognized the added benefit of antimicrobial lipids in the support of infected patients. These antimicrobial fatty acids and their derivatives are essentially nontoxic to man. According to the published research, lauric acid is one of the best "inactivating" fatty acids, and its monoglyceride is even more effective than the fatty acid alone (Kabara 1978, Sands et al 1978, Fletcher et al 1985, Kabara 1985).

It should be emphasized that lauric acid cannot be taken orally because it is severely irritating. Lauricidin® on the other hand, a derivative of lauric acid chemically bonded to glycerol to form monolaurin, can be taken orally without any problem.

The lipid-coated (envelope) viruses, bacteria and other microorganisms are dependent on host lipids for their lipid constituents. The variability of fatty acids in the foods of individuals as well as the variability from de novo synthesis accounts for the variability of fatty acids in their membranes.

Monolaurin does not appear to have an adverse effect on desirable gut bacteria, but rather on only potentially pathogenic microorganisms. For example, Isaacs et al (1991) reported no inactivation of the common Escherichia coli or Salmonella enteritis by monolaurin, but major inactivation of Hemophilus influenza, Staphylococcus epidermis and Group B gram positive streptococcus.

The potentially pathogenic bacteria inactivated by monolaurin include Listeria monocytogenes, Staphylococcus aureus, Streptococcus agalactiae, Groups A, streptococci-gram-positive organisms, and some gram-negative organisms (Vibrio parahaemolyticus and Helicobacter pylori).

Decreased growth of Staphylococcus aureus and decreased production of toxic shock syndrome toxin-I was shown with monolaurin (Holland et al 1994). Monolaurin was 5000 times more inhibitory against Listeria monocytogenes than ethanol (Oh & Marshall 1993). In vitro monolaurin rapidly inactivate Helicobacter pylori. Of greater significance there appears to be very little development of resistance of the organism to the bactericidal effects (Petschow et al 1996) of these natural antimicrobials.
A number of fungi, yeast, and protozoa are also inactivated or killed by monolaurin. The fungi include several species of ringworm (Isaacs et al 1991). The yeast reported to be affected is Candida albicans (Isaacs et al 1991). The protozoan parasite Giardia lamblia is killed by monoglycerides from hydrolyzed human milk (Hemell et al 1986, Reiner et al 1986, Crouch et al 1991, Isaacs et al 1991).

Chlamydia trachomatis is inactivated by monolaurin (Bergsson et al 1998). Hydrogels containing monocaprin/monolaurin are potent in vitro inactivators of sexually transmitted viruses such as HSV-2 and HIV-1 and bacteria such as Neisserian gonorrhea (Thormar 1999).

**Selected references from Prof. Dr. Jon J Kabara research:**


Confirmatory references by other investigators:

Kabara, Jon J. Pharmacological effects of coconut oil vs. monoglycerides Inform June 2005 pp386


Isaacs CE, Schneidman K. Enveloped Viruses in Human and Bovine Milk are Inactivated by Added Fatty Acids (FAs) and Monoglycerides (MGs). FASEB Journal 1991;5: Abstract 5325, p. A1288.


Lauricidin® is a trademark of Med-Chem Labs, Inc. Galena, IL, USA and is registered in the United States Patent and Trademark Office.

For more details, go to (http://www.ncbi.nlm.nih.gov) on the internet and search the above references.
Larry King CNN Transcript Interview with Dr. Andrew Weil M.D.

CALLER: What do you do for genital herpes?

WEIL: For genital herpes, there are pharmaceutical drugs that suppress it, that are effective, they have to be taken all the time and they are expensive. There is a natural product that I’d recommend experimenting with, it’s called Lauricidin®. I looked this up on the Internet. It’s a fatty acid which is non-toxic. There are some very good clinical reports that significantly shortens attacks and lowers the frequency of attacks.

Over the past few years we have often recommended the oral administration of Lauricidin® for those patients/clients as a complement to our one-on-one, hands-on treatment. It is our opinion that Lauricidin® has been an effective complement to our work. We have seen these positive effects in patients ranging in diagnosis from viral encephalitis, to reflexive sympathetic dystrophy, to learning disabled and autistic children. We have not conducted a controlled study, but we have seen a large number of anecdotal case wherein Lauricidin® seemed to be quite helpful. In so far as Lauricidin® has not shown us any adverse clinical reactions, and it is a very low cost nutritional supplement, we shall continue to use it at The Upledger Institute HealthPlex.

John E Upledger D.O. O.M. M

I am not in allopathic medicine so I don’t conduct studies but as a holistic health professional I can absolutely say that my success rate in greatly reducing the severity, duration and frequency of outbreaks has vastly improved since adding Lauricidin® to my protocol. I am writing a book on the holistic treatment of herpes, HPV and shingles and Lauricidin® will be included as a recommended part of the protocol. I will also include your web site address and advise people as I always do that you are the only legitimate source of Lauricidin/monolaurin.

Christopher Scipio N.D.

I have practically every child I’ve ever treated on Lauricidin® from www.lauricidin.com and have recommended it to hundreds of other families over the years. Any substance that can actually affect the body can cause someone somewhere to have a negative reaction. I have rarely seen a negative reaction once I learned to start with smaller amounts and build up, and this would be in the form of extra “stimminess” which usually subsided with lowering of dose.

Dr. Jaquelyn McCandless M.D.

The Hep C patients that I see remain symptom free and refuse to be tested, herpes sufferers have either completely stopped having outbreaks or have almost completely stopped. Last but not least the people that use Lauricidin® regularly haven’t been sick in years.

Dr. Kenneth R. Koles Phd

I’m a nutritionally oriented chiropractor in Bend, Oregon. Just wanted to put in a good word for how clinicians like myself are using monolaurin-Lauricidin®. I am finding it useful for colds, flues, and yeast overgrowth. I have a couple of people using it for herpes outbreaks. In the natural health field we are always looking for better approaches to these problems. Lauricidin® appears to be a new weapon for these problems & an alternative to herbals such as oregano oil & grapefruit seed extract. Lauricidin® is also an alternative to other fatty acid products such as caprylic acid from CNO & undecenoic acid from castor bean.

Jim Neilson D.C.
Testimonials from Lauricidin® Consumers
(Individual results may vary)

**Herpes**

I’ve been using Lauricidin for about 2 years now and I’m extremely happy with the results. I’ve had no side effects at all, and have not had one outbreak since taking it. Every once in a while when I feel I may be close to an outbreak, I increase my dosage for a couple of days and it goes away.

**Chatsworth, CA**

I am a 54-year-old woman and have had major outbreaks of genital herpes since I was 20. I’ve gone through all the drugs trying to keep it under control but was not too successful. I started Lauricidin® about 1½ year ago. The only outbreak I’ve had was when I was feeling so good I forgot to take it, In fact I’ve told everyone that I can think of that I can think of that might benefit. Thank you for this wonderful supplement that has changed my life!

**Grand Ronde, OR**

I was one of those cases who had constant breakouts with miserable pain. I think I now have the best formula for me I take 2 scoops of Lauricidin® 3 times a day and now have no outbreaks (I mean none). I’m extremely grateful for this natural alternative to antivirals.

**The Villages, FL**

**Chronic Fatigue**

I am so grateful there is a product out there like Lauricidin® that could help me get healthy in a safe way. Within a month of using Lauricidin® my energy level tripled, and as a result I’m a much happier person.

**Jamaica Plain MA**

I have been using Lauricidin® since 10/2001. My experience has been very positive with my fatigue issues. I’ve tried to stop using Lauricidin® several times and my fatigue comes right back. I now continue to use Lauricidin® on a daily bases and it has allowed me to get back to a fairly normal life.

**Nottingham PA**

The first 3 days of one scoop twice a day produced immediate increase in energy lasting all day, along with clearer thinking and deeper, longer sleep. I listened to my body in how much and how often I ingest Lauricidin®. The results have been excellent and I am very grateful for this wonderful product.

**San Anselmo CA**
Toe Nail Fungus

I have used Lauricidin® as a preventative, and have gotten the nice side effect of no longer having toenail fungus. I feel better and have more energy. I think it's an amazing product, and I am grateful to Dr. Kabara for having discovered it, found a way to make easy to take, and especially for making available at such a low price to the public.

Reno NV

I have had a history of toe-nail fungus. I have taken Lamisil in the past but I am a heart patient so, I decided to take Lauricidin® orally instead. I have had more results in three months, taking Lauricidin®, than I had in a year taking Lamisil. I am very pleased with my results with Lauricidin® and I intend to continue using these products.

Springfield, MO

Hep C

I saw my doctor when I was taking ½ scoop of Lauricidin® BID. He tested me and upped my dosage to 3 full scoops a TID. I immediately broke out with a rash which went away in a few days. I seem to be tolerating about 2/12 scoops a day. Bottom line, my Hep PCR qaut is down and is in large part responsible for the ever-increasing drop in my viral load. It's by far the most amazing supplement I've ever been on. I believe I have even dissolved nuisance fibroid recently, and I attribute it to the Lauricidin®, without a doubt.

Somersworth NH

When he first started taking monolaurin 8 years ago, his ALT went from 562 to 120 in about 2 years. This last test was the biggest jump we've seen from 238 to 469 in 6 months. These past 6 months were the only time he WASN'T using monolaurin. We were trying a different approach with alpha-lipoic acid and selenium. Obviously, this didn't work. Michael has no symptoms at all. He used to deal with fatigue and depression before we stated monolaurin therapy, but that is long gone.

North Aurora IL

Autism

My son, who is now 12, has really benefited from Lauricidin®. He began taking it just over a year ago and continues to take a scoop twice a day. After an initial three-week die-off period, he stabilized at a much healthier level than before. It has not cured him but does seem to be an important part of his overall ongoing treatment for a dysregulated immune system, including a viral overload, by keeping him on more of an even health level as opposed to previous wild swings in health. If he skips a dose, we do notice that he shows more signs of allergy/immune weakness for a few days.

Piano, TX

Hi. I just wanted to thank you for your prompt shipment to us this past week. I have a 23-month-old PDD/NOS son who is close to losing his diagnosis due to diet/supplement /enzyme intervention. And the wonderful grace of a loving God. One of the most heart breaking parts of this disease is when the child cannot reciprocate with affection. I miss my child putting his head on my shoulder for comfort but there has been a "wall" there now for months. To me it is the most difficult part of this. Tonight he sat in my lap and allowed me to cuddle him without being "stiff for the first time in months. What a gift and way to start the New Year. I truly believe your product Lauricidin® was a big part of this latest improvement.

Auburn, AL
I want to share with you some of the changes we have already seen in our son (dx'd with autism, aged 8), which I had at first not attributed to the Lauricidin®, As I expected changes to come in the area of speech, but now have no reason to believe it was as I have added no new supplements: He has increased focus and showing new interest in books and interactive computer games (sometimes he had only two a very limited degree he also has been much happier and vocalizing more (he is nonverbal).

Buena Park, CA

Flu & Sinus

My daughter and I start taking Lauricidin® when we feel like we are getting a cold or sinus infection. I am proud to say that I suffered with the sinus problem quiet frequently until I started the Lauricidin®. I did not have one the entire year of 2002 and 2003. We were out of Lauricidin® just recently and my daughter got a full-blown sinus infection. It really works for us.

Beavercreek, OH

My wife and I take Lauricidin® when we feel a cold on sickness coming on. About 5-6 times we both felt a sickness coming on and we took it (one scoop) at 6:00 PM and one at 10:00 PM, before bed. Every time we wake up with no symptoms, my wife calls them the magic pebbles.

Woodside, CA

Multi-use

I originally started using Lauricidin® for my cat’s herpes to the eye, but I ended up using it more for myself and my family then the cat. It has helped my father with is prostate cancer, my mother with her intestinal problems, and myself with a server sinus problem I’ve had for years. What a difference Lauricidin® has made in my life!

Alpharetta, GA