$2.5B spent, no alternative med cures

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In this photo taken on Feb. 4, 2009, Elizabeth Karkosky a Tapas acupressure technique, with one hand cradling the back of her neck and the thumb and ring finger of the other hand in the corners of her eyes and the middle finger in the center at the 'third eye', during a therapy session in Portland, Ore. A $2 million government study will test whether this acupressure technique can prevent dieters from regaining weight. (AP Photo/Greg Wahl-Stephens)

(AP) -- Ten years ago the government set out to test herbal and other alternative health remedies to find the ones that work. After spending $2.5 billion, the disappointing answer seems to be that almost none of

them do.

Echinacea for colds. Ginkgo biloba for memory. Glucosamine and chondroitin for arthritis. Black cohosh for menopausal hot flashes. Saw palmetto for prostate problems. Shark cartilage for cancer. All proved no better than dummy pills in big studies funded by the National Center for Complementary and Alternative Medicine. The lone exception: ginger capsules may help chemotherapy nausea.

As for therapies, acupuncture has been shown to help certain conditions, and yoga, massage, meditation and other relaxation methods may relieve symptoms like pain, anxiety and fatigue.

However, the government also is funding studies of purported energy fields, distance healing and other approaches that have little if any biological plausibility or scientific evidence.

Taxpayers are bankrolling studies of whether pressing various spots on your head can help with weight loss, whether brain waves emitted from a special "master" can help break cocaine addiction, and whether wearing magnets can help the painful wrist problem, carpal tunnel syndrome.

The acupressure weight-loss technique won a $2 million grant even though a small trial of it on 60 people found no statistically significant benefit - only an encouraging trend that could have occurred by chance. The researcher says the pilot study was just to see if the technique was feasible.

"You expect scientific thinking" at a federal science agency, said R. Barker Bausell, author of "Snake Oil Science" and a research methods expert at the University of Maryland, one of the agency's top-funded research sites. "It's become politically correct to investigate nonsense."

Many scientists say that unconventional treatments hold promise and deserve serious study, but that the federal center needs to be more skeptical and selective.

"There's not all the money in the world and you have to choose" what most deserves tax support, said Barrie Cassileth, integrative medicine chief at Memorial Sloan-Kettering Cancer Center in New York.

"Many of the studies that have been funded I would not have funded because they seem irrational and foolish - studies on distant healing by prayer and energy healing, studies that are based on precepts and ideas that are contrary to what is known in terms of human physiology and disease," she said.

In an interview last year, shortly after becoming the federal center's new director, Dr. Josephine Briggs said it had a strong research record, and praised the many "big name" scientists who had sought its grants. She conceded there were no big wins from its first decade, other than a study that found acupuncture helped knee arthritis. That finding was called into question when a later, larger study found that sham treatment worked just as well.

"The initial studies were driven by some very strong enthusiasms, and now we're learning about how to layer evidence" and to do more basic science before testing a particular supplement in a large trial, said Briggs, who trained at Ivy League schools and has a respected scientific career.

"There are a lot of negative studies in conventional medicine," and the government's outlay is small compared to drug company spending, she added.

However, critics say that unlike private companies that face bottom-line

pressure to abandon a drug that flops, the federal center is reluctant to admit a supplement may lack merit - despite a strategic plan pledging not to equivocate in the face of negative findings.

Echinacea is an example. After a large study by a top virologist found it didn't help colds, its fans said the wrong one of the plant's nine species had been tested. Federal officials agreed that more research was needed, even though they had approved the type used in the study.

"There's been a deliberate policy of never saying something doesn't work. It's as though you can only speak in one direction," and say a different version or dose might give different results, said Dr. Stephen Barrett, a retired physician who runs Quackwatch, a web site on medical scams.

Critics also say the federal center's research agenda is shaped by an advisory board loaded with alternative medicine practitioners. They account for at least nine of the board's 18 members, as required by its government charter. Many studies they approve for funding are done by alternative therapy providers; grants have gone to board members, too.

"It's the fox guarding the chicken coop," said Dr. Joseph Jacobs, who headed the Office of Alternative Medicine, a smaller federal agency that preceded the center's creation. "This is not science, it's ideology on the part of the advocates."

Briggs defended their involvement.

"If you're going to do a study on acupuncture, you're going to need acupuncture expertise," she said. These therapists "are very much believers in what they do," not unlike gastroenterologists doing a study of colonoscopy, and good study design can guard against bias, she said.

The center was handed a flawed mission, many scientists say.

Congress created it after several powerful members claimed health benefits from their own use of alternative medicine and persuaded others that this enormously popular field needed more study. The new center was given $50 million in 1999 (its budget was $122 million last year) and ordered to research unconventional therapies and nostrums that Americans were using to see which ones had merit.

That is opposite how other National Institutes of Health agencies work, where scientific evidence or at least plausibility is required to justify studies, and treatments go into wide use after there is evidence they work - not before.

"There's very little basic science behind these things. Most of it begins with a tradition, or personal testimony and people's beliefs, even as a fad. And then pressure comes: 'It's being popular, it's being used, it should be studied.' It turns things upside down," said Dr. Edward Campion, a senior editor who reviews alternative medicine research submitted to the New England Journal of Medicine.

That reasoning was used to justify the $2 million weight-loss study, approved in 2007. It will test Tapas acupressure, devised by Tapas Fleming, a California acupuncturist. Use of her trademarked method requires employing people she certifies, and the study needs eight.

It involves pressing on specific points on the face and head - the inner corners of the eyes are two - while focusing on a problem. Dr. Charles Elder, a Kaiser Permanente physician who runs an herbal and ayurvedic medicine clinic in Portland, Ore., is testing whether it can prevent dieters from regaining lost weight.

Say a person comes home and is tempted by Twinkies on the table. The

solution: Start acupressure "and say something like 'I have an uncontrollable Twinkie urge,'" Elder said. Then focus on an opposite thought, like "I'm in control of my eating."

In Chinese medicine, the pressure is said to release natural energy in a place in the body "responsible for transforming animal desire into higher thoughts," Elder said.

In a federally funded pilot study, 30 dieters who were taught acupressure regained only half a pound six months later, compared with over three pounds for a comparison group of 30 others. However, the study widely missed a key scientific standard for showing that results were not a statistical fluke.

The pilot trial was just to see if the technique was feasible, Elder said. The results were good enough for the federal center to grant $2.1 million for a bigger study in 500 people that is under way now.

Alternative medicine research also is complicated by the subjective nature of many of the things being studied. Pain, memory, cravings, anxiety and fatigue are symptoms that people tolerate and experience in widely different ways.

Take a question like, "Does yoga work for back pain?" said Margaret Chesney, a psychologist who is associate director of the federally funded Center for Integrative Medicine at the University of Maryland.

"What kind of yoga? What kind of back pain?" And what does it mean to "work" - to help someone avoid surgery, hold a job or need less medication?

Some things - the body meridians that acupuncturists say they follow, or energy forces that healers say they manipulate - cannot be measured, and

many scientists question their existence.

Studying herbals is tough because they are not standardized as prescription drugs are required to be. One brand might contain a plant's flowers, another its seeds and another, stems and leaves, in varying amounts.

There are 150 makers of black cohosh "and probably no two are exactly the same, and probably some people are putting sawdust in capsules and selling it," said Norman Farnsworth, a federally funded herbal medicine researcher at the University of Illinois at Chicago.

Even after a careful study, "you know one thing more precise and firm about what that agent did in that population with that outcome measurement, but you don't necessarily know the whole gamut of its effectiveness," as the echinacea study showed, Briggs said.

The center posts information on supplements and treatments on its Web site, and has a phone line for the public to ask questions - even when the answer is that not enough is known to rule in or rule out benefit or harm.

"I hope we are building knowledge and at least an informed consumer," Briggs said.