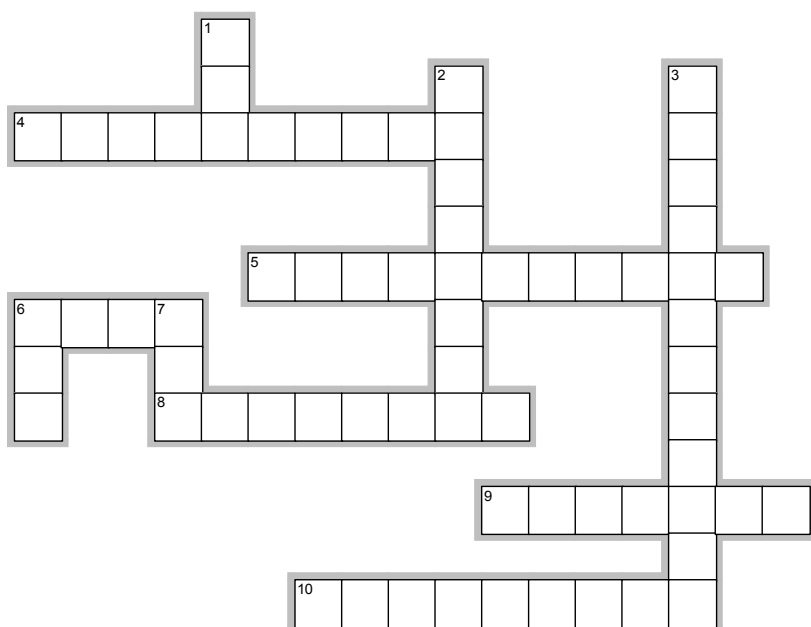
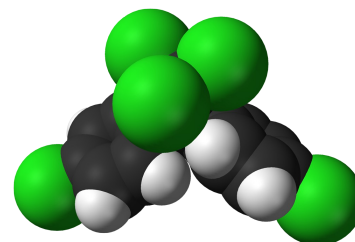


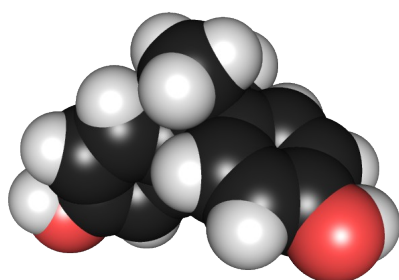
## The Disappearing Male Crossword



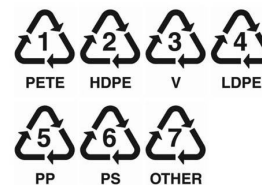
EclipseCrossword.com



DDT molecule. Green represents chlorine



BPA molecule ( $C_{15}H_{16}O_2$ )  
black is carbon  
red is oxygen  
white is hydrogen



### Across

4. A chemical that make some plastics flexible and help hold a perfume's scent. Some research suggests that it may have feminizing properties in humans by mimicking estrogen. Used to make PVC plastics.
5. A chemical containing HYDROgen and CARBON. Includes products made from petroleum such as plastics, natural gas (your furnace burns this), gasoline, and diesel.
6. Abbreviation for Di(2-ethylhexyl) phthalate used in hospital tubing and IV bags.
8. The element, when added to organic chemicals results in some of the most toxic stuff ever made!
9. A chemical produced by specific glands and cells in the endocrine system and transported by the bloodstream. These chemicals are important in reproduction, development and behavior.
10. The human body system that consists of glands and cells which produce hormones

### Down

1. The abbreviation for bisphenol A. This is a chemical used to make hard, clear plastics (polycarbonate) like in baby bottles. It is also used to line the inside of metal cans of canned foods.
2. The primary female sex hormone. It is thought that some chemicals mimic (pretend to be) this hormone.
3. The male sex hormone which helps regulate heart function and is involved in sperm production, bone health, energy levels, concentration, and muscle mass.
6. Abbreviation for **d**ichloro**d**iphenyl**t**richloroethane. An insecticide which is now banned because it is thought to be an endocrine disruptor (among other things). Paul Hermann Müller was awarded the Nobel Prize in Medicine in 1948 for his discovery of this chemical. Bed bugs are making a comeback since this chemical's ban.
7. The initials for PolyVinyl Chloride which is a common plastic used in things such as plumbing pipes. Often contain phthalate.

## What is traditional knowledge?

There are many ways of describing the sacred ways of life of First Nations. The terms “traditional knowledge” and “ways of knowing” are used interchangeably. The word traditional is not seen as something old, but as something based in tradition. Traditional knowledge is something created, preserved, and dispersed.<sup>1</sup>

First Nations use the term traditional knowledge to describe information passed from generation-to-generation. This information may be rooted in:

- storytelling;
- ceremonies;
- traditions;
- ideologies;
- medicines;
- dances;
- arts and crafts; or
- a combination of all these.

Everyone in a community or culture holds traditional knowledge because it is collective.<sup>2</sup> Traditional knowledge is determined by a First Nation’s land, environment, region, culture and language. The World Health Organization (WHO) defines traditional medicine, which forms part of traditional knowledge, as follows:



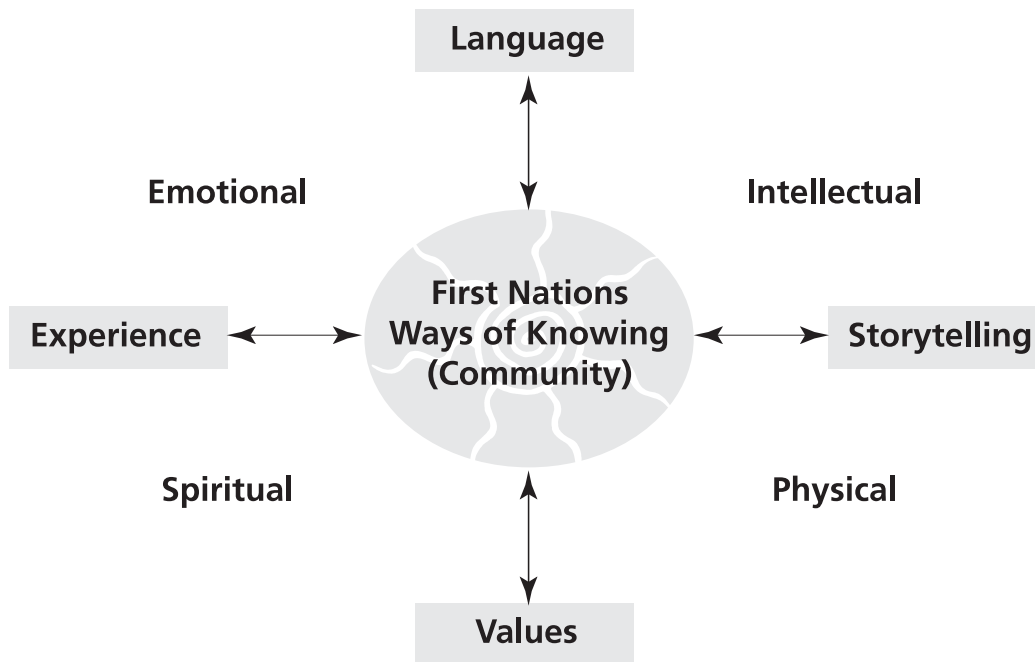
World Health Organization  
<http://www.who.int>

The sum total of knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement of treatment of physical and mental illness.<sup>3</sup>

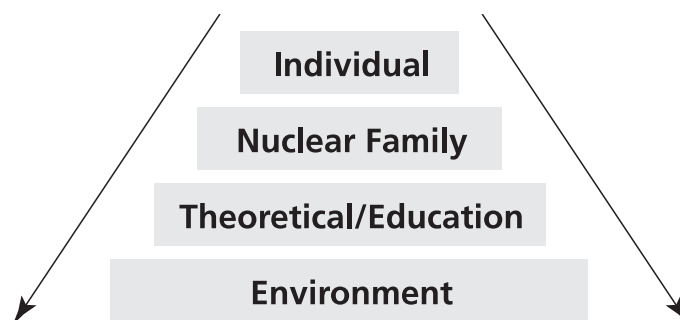
Traditional knowledge is shared through ways of exchanging cultural and traditional information, such as storytelling. People such as Elders and healers usually share this knowledge with others in the community.



***First Nations ways of knowing***



***Western ways of knowing***





### ***Comparisons between traditional and scientific knowledge in use*** <sup>14</sup>

The following table has been taken from the Alaska Native Science website at:  
**[www.nativescience.org/html/traditional\\_and\\_scientific.html](http://www.nativescience.org/html/traditional_and_scientific.html)**.

TRADITIONAL KNOWLEDGE	SCIENTIFIC KNOWLEDGE
Transfer of knowledge takes a long time	Transfer of knowledge is fast
Long-term wisdom	Short-term prediction
Powerful prediction in local areas	Powerful predictability in natural principles
Weak in distant areas of knowledge	Weak in local areas of knowledge
Models based on cycles	Linear modeling as first approximation
Explanations based on examples, stories, myths	Explanations based on hypothesis, theories, laws
<ul style="list-style-type: none"><li>• <b>Classification:</b><ul style="list-style-type: none"><li>• a mix of ecological and use</li><li>• non-hierarchical differentiation</li><li>• includes everything natural and supernatural</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Classification:</b><ul style="list-style-type: none"><li>• based on phylogenic* relationships</li><li>• hierarchical differentiation</li><li>• excludes the supernatural</li></ul></li></ul>

\* Phylogenic refers to the evolutionary development and diversification of groups of organisms.

## **Aboriginals resume traditional diet to curb diabetes epidemic**

Last Updated: Friday, February 11, 2005 | 8:05 PM ET

CBC News

Rates of obesity and diabetes in some aboriginal communities are up to 50 per cent higher than the Canadian average, but reverting to a more traditional diet may help address the problem.

For some aboriginals, cutting down on carbohydrates isn't so much a fad diet, rather it's a more modern version of the traditional diet eaten by their ancestors more than 100 years ago.

Jim Wilson of the We Wai Kai Nation grew up on Cape Mudge reserve off Vancouver Island, where seafood was a staple of his diet.

As overfishing and pollution made seafood scarce, he switched to eating fast food. "Every day something from McDonald's, just because I wasn't cooking for myself," Wilson recalled.

In 1987, Wilson's weight reached 345 pounds, he was extremely thirsty and had failing vision. Diagnosed with type 2 diabetes, Wilson was able to control the condition with insulin injections.

Last summer, after weeks on a low-carb diet, he found he didn't need the needles as often. Within a few months, he was jab-free.

It was Dr. Jay Wortman, a public health specialist in Vancouver, who challenged Wilson to return to traditional aboriginal eating habits with a low-carb diet that includes fruits and vegetables.

"Other people have had thousands of years, many generations to become accustomed to a diet that is higher in refined carbohydrates," said Wortman. "Aboriginal people haven't."

Wortman believes the dietary and lifestyle changes are at the root of the diabetes epidemic among Canada's aboriginal peoples.

Recommending a low-carb approach validates the wisdom of aboriginal ancestors who ate mainly berries, nuts and protein rather than mostly carbohydrates, Wortman said.

The science behind the diet is evolving.

Atkins is the most studied low-carb diet, and research shows it can help people lose weight and doesn't seem to harm cholesterol, but longer studies are needed to test if it helps prevent or treat diabetes.

In the meantime, Wilson says he's proud of his accomplishments to date, adding he would like to exercise more and shed another 100 pounds.

Read more: <http://www.cbc.ca/health/story/2005/02/11/diet-aboriginal050211.html#ixzz0qJili72j>

## Questions

1. Identify the hypothesis that Dr Wortman had regarding Mr Wilson's the cause of diabetes.
2. Let's look at this story from the two different ways of knowing by filling out this chart.

Assumed to be the truth	
Sacred and interconnected	
Teaching through storytelling	
Learning by doing and experiencing	
Oral and visual	
Integrated, based on whole system	
Subjective (based on personal experience/beliefs)	
Experiential (based on experience)	

Assumed to be best approximation	
Secular (non-religious) segregated	
Formal teaching	
Learning by formal education	
Written	
Analytical, based on parts of the whole	
Objective (not based on personal opinion)	
Positivist (based on facts)	

From: <http://www.nativescience.org/issues/tk.htm>

3. How has this story combined the two ways of knowing in a way that is beneficial?