Sowing & Growing Community Health: Love From the Ground Up!

Workshop Introduction

Heal our children’s hearts “from the ground” up combining school gardening, story-telling, and involving parents/families in traditional food preparation. Activities include brainstorming, food myth-busting, sample classroom activities, and creating collaborative action plans around food, love, and healing.
Traditional food producing & cooking
Why and how?

Students who garden and improve their diets through experiencing traditional food producing and “from scratch” cooking have measurable improved results in:

- Classroom learning
- Behaviour
- Communication
- Health
Traditional food producing & cooking
Why and how?

Traditional health and gardening touches every study area:

- Math
- Science
- Social Studies & Civics
- Health & Home Economics
- Physical Activity
- Language Arts
- Arts & Music & Crafts
Producing, sharing, and celebrating traditional foods connects classroom, community, families, & culture together through the enthusiasm and skills of the youth and their labours.
Traditional Foods + Gardening = Measurable Improvements

Students who garden and improve their diets through experiencing traditional food producing and “from scratch” cooking have measurable results in many academic, social, health, and behavioural areas.
Traditional Foods + Gardening = Measurable Improvements

Better focus and behaviour in the classroom

- Steady blood sugars improve focus and ability to process material
- Increased engagement through personal relevance and visible/tactile results
Traditional Foods + Gardening = Measurable Improvements

Measurably improved learning outcomes in core academic skills

- Relevance and creative student centered approaches to materials
- “Real time” applications to practice skills
- Engagement of creativity helps underachievers (soft challenges)
- Provides non-traditional and hands-on problem solving (alternate skill building)
Improved personal confidence

- At-risk students transition from “problem” to “provider”
- Calming positive influences of plants and contact with soil, nature, outdoors
- Direct measurable physical results of activity
- Something to contribute, give to others
- Ownership of something of value through own effort
- Pride in personal efforts, traditions, identity
Traditional Foods + Gardening = Measurable Improvements

Develop communication skills, empathy, and community values

- Must collaborate to achieve results
- Everybody has a value to the project
- End users are beyond the students themselves
- Care & nurturing of plants teaches empathy
Traditional Foods + Gardening = Measurable Improvements

Empowerment to affect family and community

- Interest and discussion about larger health issues
- Students become teachers and role models
- Lobby for change (in family diets, local stores, tribal programs)
- Gain understanding of their history and are empowered by it
- Students experience positive physical and behavioral changes in self and others
Traditional Foods + Gardening = Measurable Improvements

Reduced truancy and disciplinary issues in school

- Stable health and meaningful engagement lay personal safety foundations
- Improved empathy and self governance
- Learn collaborative & social skills
- Improved learning outcomes increase self respect and confidence
Traditional Foods + Gardening = Measurable Improvements

Fewer sick days & more sustained energy for sports

- Better diet improves immune systems
- Stable blood sugars and improved nutrients give energy and endurance
- Weight loss and improved energy make sports participation easier, more fun
Traditional Foods + Gardening = Measurable Improvements

Lower child diabetes and obesity rates

- Combination of better diet and physical activity prevents weight gain
- Reduction in junk foods positively impacts insulin resistance
- Knowledge about foods results in pro-active healthy food choices
- Own health experiences can be “paid forward” to others through example
Traditional Foods + Gardening = Measurable Improvements

Reduce paths to addiction, poverty, and criminality

- Improved educational outcomes
- Stabilize emotional and social behaviors
- Provide healthy food to self, family, and community
- Connection to traditional values
- Meaningful & measurable results of own positive efforts
- Independence and sustainability - reduced dependency mentality
Traditional Foods + Gardening = Measurable Improvements

Create & embed life-long positive health habits

- Develop taste for healthy foods
- Equate food with energy and learning in a positive dynamic
- Peer to peer support and knowledge exchange embed healthy habits
- Pride in traditional foods and traditions develops positive feedback loop

Tuesday, May 19, 2015
Traditional Foods + Gardening = Measurable Improvements

Develop new healthier role models and images of Native Americans

- Lean energetic, healthy
- Pride and participation in food traditions
- New confidence resulting from sustainable food independence
- Transition self image from powerless problem to providing producer
- Control of food from ground & seeds to distribution & table = independence
Traditional health and gardening touches EVERY study area!

Traditional Foods activities can be integrated into the entire curriculum. Every subject can be connected to a core subject in some way.

This connection makes studies more relevant and interesting.

For many students, the hands-on applications can help their academics and focus.
Traditional health and gardening touches EVERY study area!

Math

- Basic algebraic skills (how many seeds, counting harvest, cooking measures)
- Geometry (design garden layouts, calculate produce per sq foot, design storage)
- Statistics (production, distribution, relations to weather and other variables)
- Basic engineering (constructing garden beds, trellises, storage, distribution)
Traditional health and gardening touches EVERY study area!

Reading

- Comprehension (instructions for planting and other tasks)
- Writing (instructions, plans, reports, promotions, menus, recipes, poetry)
- Organizing thoughts and communications (reports, essays, planning, communicating traditions and other knowledge and feelings)
Traditional health and gardening touches EVERY study area!

Science

- Biology Biology (plants & trees, soil, pollination, insects, wildlife)
- Geography (What grows where, food storage conditions, location influence on diet)
- Geology/meteorology (Weather, drought, rivers, soil conditions, climate change)
- Chemistry (Nutrients, fertilizing, storage & preserving)
- Ecology/environment (farming, hunting & gathering, climate change, topsoil erosion)
- Scientific method (Experiments, tracking outcomes, collecting data, research)
Traditional health and gardening touches EVERY study area!

Social Studies

- History (research of food traditions, changing influences on food and people)
- Food related behaviour (feast & famine, migration, nutrition & disease, addictions)
- Economics & politics (commodity foods, GMO, distribution economics, local foods, food independence and sustainable communities)
- Food distribution (storage and delivery, prices, climate change, food sharing traditions)
Traditional health and gardening touches EVERY study area!

Civics, Spiritual, and Community Values

- Collaboration (decision making, garden designing, planting & harvesting, storage & feasts, distribution)
- Planning (garden layout, choice of plants, task management, calendars)
- Working for greater good (food sharing traditions, healthy community, sustainability)
- Respect for all living things (nurturing and blessing, wild harvesting – how much is enough or too much)
- Connecting to, and reviving, shared traditions around planting, harvesting and feasting
Traditional health and gardening touches EVERY study area!

Physical Activity & Education

- Building and preparing plant beds and/or retaining walls
- Digging, sowing, weeding, irrigating, harvesting, distribution, storage
- Teamwork and seeing direct results of activities
- Creating games and friendly competition between teams/classes/grades
- Safe physical work habits
Traditional health and gardening touches EVERY study area!

Art, Poetry, Storytelling, and Music

- Design of planting areas
- Posters and promotions, school newsletter
- Photography, drawings, paintings of the garden
- New and traditional songs and drumming, poetry and other writing and storytelling
Traditional health and gardening touches EVERY study area!

Home Economics and Healthy Living

- Nutrition basics and connections
- Cooking skills, storage, budget and meal planning
- Learning how to research traditional foods & diets
- Reviving and practicing family and community food traditions
- Understanding seasonal foods and nutritional patterns
- Direct experience of the effects of food on behaviour and health
Busting Food Myths!

There are many food myths out there.

These include some about what Native American food is and is not.

Let's explore these myths ...
With the exception of some maize and wild rice eating tribes, most Native Americans did not eat grains in any significant amount and many ate no grains at all.

Native Americans normally had superior health and long lifespans.
Frybread is NOT traditional Native American Food!

- Trail of Tears starvation diet
- We are not genetically designed to eat this food – it makes us sick
- Promotes deficiency diseases
Busting Food Myths!

Some deficiency diseases we suffer from non-traditional foods

- Eczema
- Beriberi
- Pellagra
- Biotin deficiency
- Rickets
- Scurvy
- Vitamin K deficiency
- Night Blindness
- Osteoporosis
- Ankylosing Spondylitis
- Birth defects
- Thyroid diseases
- Heart diseases
- Diabetes
- Obesity
Busting Food Myths!

Destructive Dairy

- We are a “type O” people, most of whom have no enzymes to digest dairy.
- We did not herd dairy animals.
- Our minerals came from ground and root plants, animal and fish bones & marrow, and natural salts.
- Arthritis was almost unknown and treated with herbs.
Busting Food Myths!

Traditional Native American sources of calcium, magnesium, selenium, zinc, potassium, boron, and other essential minerals

- Bones and bone marrow
- Mineral salts
- Grass fed animal and fish
- Roots and ground vegetables
- Teas from certain barks, herbs, and leaves
- Seaweed
- Shellfish
- Foods cooked and preserved with seawater
Busting Food Myths!

Women were not “Lousy Hunters”

- Native Americans did NOT live on only meat, meat, and meat!
- Majority of “man-hours” devoted to securing food were by women gathering and growing.
- Non-animal foods could be up to 75% of diet.
- Vegetable foods were dried, sprouted & parched, or pounded into meat and fat (pemmican) to preserve them against lean times.
**Busting Food Myths!**

**Staple Vegetable Foods of different tribes**

- Maize (hard corn)
- Beans
- Gourds (pumpkins, squashes, other gourds)
- Wild rice and grass seeds ( parched and sprouted)
- Fruits and berries
- Nuts and Pine nuts
- Roots and rhizomes (wild potatoes, yams, and carrots, fern roots, tubers, ground nuts)
- Tree and bush shoots (spring shoots)
- Wild vegetables (cabbages, garlicks, lettuces, cruciferous plants)
- Mushrooms & funghi
- Flowers and herbs
- Seaweeds
- Kelp
- Algae
Both village-living AND nomadic tribes planted and harvested food.

Slash & burn techniques renewed the soil and villages relocated periodically to sustain resources.

Some tribes practiced "wild sowing" - this gave a regular food source and increased biodiversity.

Fishermen also guarded their grounds, which prevented over-harvesting.
Busting Food Myths!

- Traditional farmed foods included “Three Sisters” (corn, beans, and squashes).
- Wild sown foods included rice, grasses, nuts, and some berries.
- Wild harvested foods included berries, fruits, nuts, fiddleheads, roots, barks, herbs, tree shoots.
- Wild harvested animal foods included clams, crabs, oysters, sea urchins, cockles, kelp, algae, and seaweeds.
- Wild harvesting was done sustainably, taking small amounts and sowing seeds in return.
Why are modern foods so harmful to us? What exactly is the harm that they do?

- The Diabetes Dilemma
- Sugar, Wheat, and Addictions
- Learning, Behaviour, and Food
- Genetic Priming for Nutrients
We are designed for insulin resistance to survive alternating feast and famine cycles of nature.

We burned A LOT of calories and needed a lot of high quality fats and proteins.

When we feast without exercise, we get fat and sick quickly, because our natural insulin resistance kicks in.

“Healthy grains” make this syndrome much worse - they are literally fatal for Native Americans!
We did not eat grains or refined sugars for 10,000 years. We cannot digest them properly.

Modern grains cause extreme blood sugar highs and lows, as well as addictive brain chemistry patterns.

High fructose corn sugars have similar addictive effects.

Highs, lows, and withdrawal mimic and can complicate other addictions.
Modern & European Foods
More Harm than Good?

Learning, Behaviour, and Food

- High carbohydrate diets cause violent mood swings and concentration problems
- Without “slow burn” proteins, children lose focus and concentration, become irritable and suffer withdrawal like symptoms
- Some learning disabilities can become worse
- Some children improve when gluten and dairy are removed from diet.
- All children improve when blood sugar levels stabilize
Each tribe has eaten specific foods for thousands of years.

Each geographical area offers a different set of nutrients.

We have become genetically primed for certain levels of nutrients in our food - our needs do not change even if we move someplace else.

Without those nutrients we get sick in different ways.

Our tribal food traditions teach us what to eat, when, & how much.

Most of our foods were eaten fresh, raw, dried or smoked - and full of enzymes so we could digest them efficiently.

We cannot find the right healthy balance in foods that have had the nutrients taken away, or foods that give us untraditional balances of nutrients.
Food is not only the ingredients it is made of. It is how we cook, serve, and eat our meals.

Fast food takes away a huge part of who we are as human beings. Fast food denies us our spiritual connections to each other and our land. Fast food impoverishes our bodies and robs us of our family traditions and our skills for taking care of ourselves.
The Path to Our Healthy Traditions

Fast Food “Unculture”

- Modern children don’t know where their food comes from
- Basic cooking skills are being lost
- Fast foods are addictive and unhealthy
- There are no traditions or connections with who we are in fast food
Preparing food from scratch awakens healthy appetite and lifts our mood

Preparing and eating together builds family connections

When children prepare food they have grown they grow pride and traditional knowledge

Traditional foods give life - physical, emotional, spiritual, cultural and community
The Path to Our Healthy Traditions

Traditions are Medical Health Knowledge

- What foods and medicines are traditional for us in our tribe?
- How and where were those foods grown, gathered, and hunted?
- What nutrients were in the soil and the plants – and also in the animals who ate them?
Growing our Food = WHO WE ARE

- When we know the reasons for our foods we are more interested and love our food traditions ...and ourselves
- Together with our children we can rediscover who we are and literally grow it back into our lives
- A drum song about corn is not just a song when you have grown that corn, nursed it through a hot dry summer, and shared it at a feast. It is WHO YOU ARE.
ACTIVITY 1: Food Identity

Our food identity now comes from TV, advertising, cereal boxes, USDA commodity recipes, what’s available at the supermarket or convenience store, pharmaceutical advertising.

This food identity includes negative self images and messages — being fat, inactive, needing prescription drugs to be “healthy”.

How can we change that — and change who we are into something more like what we originally were?

We start by getting to know our Traditional food identity!
The Path to Our Healthy Traditions

- Where are we from?
  - Our geography and territories
  - What foods grew there
  - What did we hunt? What could we plant? (Did we plant?)
  - How can we research what nutrition was in the land
- Remembering our traditional foods
  - Stories from grandmothers
  - History of our people
  - Food traditions
  - Seasonal foods and special feast or healing foods
Create an imaginary feast or meal together which features a traditional food for a special occasion or need.

Examples:

- Special food for a New mother
- Summer harvest
- Marriage feast
- Young hunter’s first successful hunt
ACTIVITY 2: Sowing With Love

How can we bring gardening of our traditional foods and other healthy foods into our schools and communities?

Brainstorming

- What do we have already at our school we can use? (expertise, lumber, space, funding, programs we can hook into)
- What do we need to resource to get started?
- Thinking outside the box – unlikely partners and sources of help
- Are these resources in our community? Elsewhere? Social Media?
- How big/small do we want to start?
### The Path to Our Healthy Traditions

**How many of these Knowledge Resources do we know, can we use?**

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<tr>
<th>Resources</th>
<th>Description</th>
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<td>American Indian Institute</td>
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<td>Books and the interlibrary system</td>
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<tr>
<td>Oral histories, art, storytelling, local collections and diaries</td>
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<tr>
<td>Internet &amp; social media</td>
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<tr>
<td>Agricultural programs in universities, colleges, &amp; community colleges</td>
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<td>Local garden clubs &amp; farmers</td>
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<td>NGOs working with sustainable communities, environment, wildlife, &amp; food</td>
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<td>Native Diabetes Prevention Program</td>
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<td>Edible Schoolyard and other foundations</td>
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<td>Government and university/college research programs and students</td>
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<tr>
<td>Smithsonian Institutes, Libraries, and Research &amp; Cultural Centers</td>
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How many other “unlikely” knowledge resources can we think of, stumble across, and inspire our schools and families to come up with?

- Do we have “hidden” knowledge? This is the kind of know-how or information that we might not have realized was about our food traditions.
- An old song that tells about harvesting berries or time of the moon to hunt or fish
- “Superstitions” or proverbs about what to eat, when to eat it, where to gather it.
ACTIVITY 3: Getting from SAD to Trad!

SAD means “Standard American Diet” – full of commodity type foods, refined foods, high in refined carbs, sugars, and unhealthy fats.

Visualizing together

Draw a knowledge path for our community’s children and families to rediscover your traditional foods and start bring them back to life in your classrooms, schools, and community.
This is an activity that can be done together with children, teachers, parents – make it colorful and fun!
The Path to Our Healthy Traditions

- Picture our foods
- Show the kinds of school activities that are connected to traditional foods
- Draw our resources, our experts, our helpers
- Picture the results
- Use synergies, knowledge & resource trading
- Hang these murals and pictures in the school, community, our homes
The Path to Our Healthy Traditions

For more information:

Rose Hamilton  BSc Hons
Holistic Nutritionist  Economic & Community Consultant

Building Communities Through Sustainable Health & Economic Development
Partnership & Funding  Workshops & Training

7648 197 Street  Langley, BC  V2Y 1S2  T: +1 604.765.0501