

# Zinc & Health Quarterly Newsletter

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Karina LeBlanc, member of the bronze medal-winning 2012 Canadian Olympic Soccer Team, on stage at We Day Vancouver talking about Teck's Zinc Saves Live Battery Recycling Campaign

## 2014 We Day Season Kicks Off

This October, Teck kicked off its fourth We Day campaign to raise awareness about zinc deficiency and the importance of zinc for human health. Zinc is critical for normal growth and a strong immune system, yet 450,000 children die every year before their fifth birthday because they do not get enough zinc through their diet.

This We Day season, Teck is partnering with Call2Recycle to encourage students across Canada to recycle used household batteries to keep them out of landfills. Did you know that every AA battery has enough zinc in it to save the lives of six children?

For every used household battery recycled, Teck will donate the equivalent value of zinc to UNICEF in support of our zinc partnership program in India.

There are three simple steps to participate:



Recycle your used batteries at any of Call2Recycle's 6,000 collection depots across Canada. To find a depot near you, visit [www.call2recycle.ca](http://www.call2recycle.ca)



Report your name, the collection depot and the total weight of the batteries you have recycled at [www.zincsavestives.com](http://www.zincsavestives.com)



Spread the word on social media using the hashtag **#zincsavestives** and encourage others to join the campaign!

Mark your calendars for the We Day 2014-2015 season!

### We Day Alberta

November 3

### We Day Montreal

March 24, 2015

### National We Day

April 1, 2015

Watch for an update on the campaign's progress and more on the recent We Day Toronto and We Day Vancouver events in an upcoming Zinc & Health Quarterly Newsletter.



Calgary Stampede Breakfast volunteers at the Zinc & Health table

## Zinc & Health featured at Calgary Stampede Breakfast

Teck Calgary's Zinc & Health team, led by Denise Maigret and volunteers Rukku Gupta, Clara Nguyen and Kim Lee, raised a total of \$329.65 at Teck's Calgary Stampede breakfast on July 11. Teck matched the amount raised to total \$659.30 that will be donated to Zinc Saves Kids.

Zinc Saves Kids is a UNICEF zinc supplementation program in Nepal and Peru, funded in part by Teck through the International Zinc Association. To date, 600,000 children have received zinc supplementation as a result of the program.



Pictured from left: Greg Garrett, Global Alliance for Improved Nutrition (GAIN), and Andreas Bluthner, BASF, are photographed with the iCheck Zinc kit at the 2014 Micronutrient Forum.

## iCheck Zinc at Micronutrient Forum

iCheck Zinc, an innovative zinc test kit developed by BioAnalyt for Teck and BASF, was featured at the 2014 Micronutrient Forum in Addis Ababa, Ethiopia this past June. The Micronutrient Forum brings together the most exciting and current research and programming on nutrition, with a focus on micronutrients, such as zinc. BioAnalyt hosted a series of learning sessions around the topic of micronutrient analysis and the challenges in validating

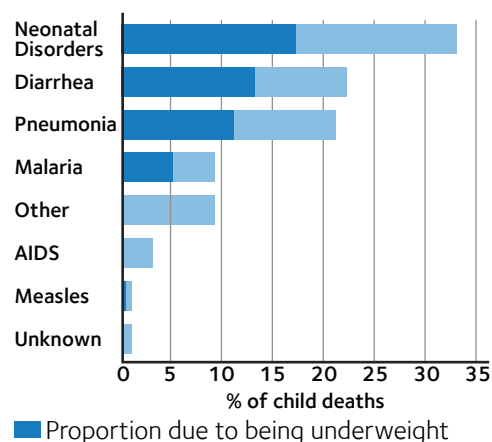
small but powerful micronutrients in staple foods. Representatives from BioAnalyt conducted interviews with leading figures from NGOs, universities and the private sector for a short documentary on the importance of measuring the content of zinc and other fortificants. Teck and BASF's food fortification partnership has provided 70 million people with access to zinc-fortified foods to reduce widespread micronutrient deficiencies.

## Teck Joins United Nations Diarrhea & Pneumonia Working Group

This year, Teck joined the United Nations' Diarrhea & Pneumonia Working Group (DPWG), a global technical reference team for the UN Commission on Life-Saving Commodities for Women & Children. The DPWG is the only global-level coordinating body focused on accelerating access to treatment for childhood diarrhea and pneumonia, including zinc and oral rehydration salts (ORS). DPWG members include the Bill & Melinda Gates Foundation, Clinton Health Access Initiative, the World Health Organization, and Teck partners UNICEF and the Micronutrient Initiative.

On September 4, the DPWG met to review implementation progress of zinc/ORS and address key bottlenecks in Ethiopia, Kenya and India, three countries where Teck is supporting zinc scale up projects through the Zinc Alliance for Child Health. In addition, the working group is now developing a tool to capture the global landscape of zinc/ORS availability in an effort to reduce the depletion of stocks in rural areas. To learn more about the DPWG, please contact Alannah Cervenko at [alannah.cervenko@teck.com](mailto:alannah.cervenko@teck.com).

### Global Child Deaths by Cause



Source: Black, Morris and Bryce



# The Cominconian

NEWS AND VIEWS ABOUT COMINCO

JULY, 1964

## Perry Elected to Finance Post

MONTREAL—R. D. (Ralph) Perry has been elected Vice-President, Finance, of Cominco.

Mr. Perry graduated from Acadia University, Wolfville, N.S. in 1927 with the degrees of B.A. and B.Sc. He took postgraduate work at Queen's University then joined Cominco at Trail in 1928.

His career with Cominco has covered a broad field of the Company's activities. He held supervisory posts in the metallurgical division, becoming superintendent of the refining department in 1944.

In 1945 he was moved to personnel work as labour relations officer. A year later he became general superintendent of the research and development division. In 1949 he joined the management group as administrative assistant with special responsibilities in labour relations. In that year he also attended the advanced management program of the Harvard Graduate School of Business Administration.

Mr. Perry was appointed assistant general manager in 1951, general manager in 1952 and vice-president and general manager in 1956. In 1963 he was appointed vice-president at Montreal. He became a director of Cominco in 1958; he is a member of the executive committee.



R. D. Perry

## McKenzie Hits Suggestion Jackpot



Charlie McKenzie (r.) receives congratulations and a Suggestion Plan award from Herb Chalmers, superintendent of the Sullivan Concentrator.

KIMBERLEY—C. A. (Charlie) McKenzie earned a \$285 Cominco Suggestion Plan award to make him top winner in the March-to-May roundup of employee idea men. In all, 150 ideas were approved and \$2,115 was paid by the Company during the period.

McKenzie's idea was to use heavy equipment in place of hand mucking to build dams in the Sullivan Concentrator's tailing pond.

TRAIL—J. M. Koerber, a machinist in the zinc department at Trail, and Murdo Graham, a machinist in the chemicals and fertilizers division at Trail, were second and third highest award winners on the March-to-May list. Koerber proposed a new method of attaching shafts in pumps handling zinc sulphate solution to win \$170. Graham won \$150 for an idea leading to more efficient operation of dryers in the phosphate plant.

## Impressed by Head Office

George Lutjen, writing in a recent issue of the Engineering and Mining Journal, gave Cominco a much appreciated pat on the corporate back for product use promotion. He said: "We had grown accustomed to seeing aluminum companies, steel companies and even banks setting up shop in bright, open, modern offices; but a lead-zinc company's offices atop a new skyscraper and a study in tasteful, attractive, wall-to-wall modernity, took our breath away."

More impressive was the fact that everywhere the company had woven its own products—plain, homely, old lead and zinc—into the office design. This effort makes the Cominco office one of the finest pieces of promotion we have ever seen for two of our favorite metals.

A visitor leaves the premises with an entirely new concept of the potential of lead and zinc in modern buildings. Not only has he seen for himself the practical and attractive applications of the metals, he knows that Cominco believes in what it's selling."

## Pass the Zinc!

If you are short in stature it could be because you didn't get enough zinc in your diet when you were growing up, says The Financial Post.

Research by Egyptian scientists headed by Dr. A. S. Prasad strongly suggests that degrees of stunted physical development may be related to a deficiency of zinc in the diet or a defect in the zinc-absorption mechanism in the body. Many enzymes in the body are activated by zinc.

## Lead Becomes Life Preserver

Beautiful and strange, Great Salt Lake is one of the most unusual tourist attractions, says The Shamrock magazine. It is also unusual in terms of a product use for the metal lead. Swimmers, continues The Shamrock, find the water tends to lift their feet above their heads, and lead ankle weights actually serve as life preservers.

It's a topsy-turvy world!

JULY, 1964

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## 1964 Zinc Article in The Cominconian

Teck launched its Zinc & Health program in 2011, but we have been sharing the importance of zinc for human health for more than 50 years! Check out this front page article from the July 1964 issue of Cominco magazine. Cominco merged with Teck in 2008 to form Teck Cominco, and the company is now known as Teck.

The Cominco Magazine began publication in February 1940 as a means to entertain and

engage with employees, specifically those employees contributing to the war effort overseas.

The magazine was published monthly until mid-1968 and was delivered to all employees and retirees of the company. Today it continues to be a valuable resource for historical information.

## Zinc in the News

### Boost Your Zinc Intake for Good Mental Health

Zinc is not only beneficial for the body, but it can help keep your mind healthy as well. These are the findings of two Australian studies that suggest taking zinc supplements may reduce the risk of depression.

The studies set out to investigate dietary zinc as a predictor for incidents of depression in middle-age and older Australians. The two participant groups, women aged 50–61 years and men and women aged 55–85 years, were asked to complete food frequency questionnaires, which were used to assess dietary intake.

Results from both studies showed an inverse association between the consumption of dietary zinc and risk of depression. In short, participants who had the highest intake of zinc had a significantly lower risk—in some cases, as much as 30–50% lower—of developing depression than those with lower zinc intake levels.

### Wondering how to add more zinc to your diet?

To help keep a good supply of zinc in your diet, include foods such as seafood, beef, spinach, fruit, nuts, chocolate and chicken.





## Getting to know... Nancy Tracy, Zinc & Health Captain, Red Dog Operations



### What is your role at Teck?

I'm a Senior Mine Engineer in the Projects group at Red Dog.

### Why did you want to be a Zinc Captain?

I worked very closely with Shaun Herron, the previous Zinc Captain at Red Dog, in the Projects group. Shaun became very interested in our Zinc & Health program and did a presentation for our Student of the Industry sessions. I helped him with the presentation and found it really interesting that Teck was making a difference through zinc. When Shaun retired recently I decided to take on the position.

### What is your favourite zinc-rich food?

Hmmm, probably seafood!

### What are you most looking forward to in your role of Zinc Captain?

I have a unique position working at Red Dog. I see the daily mining operations and shipment of zinc. I look forward to continuing to understand the impact we have from a remote camp above the Arctic Circle to making people's lives better.



A Health Extension Worker, trained through funding by Teck, measures the arm of a child in Oshana, Namibia to assess the level of malnutrition.

## Teck's Support Helps Scale Up Successful Namibia Pilot Project

In April 2012, UNICEF Namibia, in coordination with Namibia's Ministry of Health and Social Services (MoHSS), launched the Health Extension Worker (HEW) program to bring basic healthcare services to children and families living in rural areas of Namibia, or areas located far from clinic facilities.

The HEW program began as a pilot project funded by Teck, through UNICEF Canada, and by contributions from the Government of Namibia, USAID and several other private sector partners.

Initially, a six-month HEW training program was attended by 34 community members from rural areas, who learned how to provide services in first aid, maternal and newborn health, child health and nutrition, HIV/AIDS, malaria, tuberculosis, social welfare and disabilities.

Over the next two years, there was a significant reduction in child mortality in rural areas of Namibia. As a result, the pilot project has become a fully-fledged national program under Namibia's MoHSS. More than 560 HEWs provide service to five regions in Namibia, and by the end of April 2015, there will be more than 1500 HEWs bridging the gap between health facilities and rural communities.

Additionally, HEW's are no longer volunteers. Instead, they are compensated by the Ministry of Health for their service. Many have continued their education and joined the field of nursing. UNICEF and the Ministry of Health and Social Services have expressed appreciation to Teck for its support of a small pilot project that has grown significantly to reduce child mortality across Namibia.

# Partner Feature: Free The Children

## Who is Free The Children?

Free the Children is an international charity and youth movement that was founded in 1995 by 12-year-old Craig Kielburger. It focuses on creating a world where all children are able to achieve their fullest potential and work as agents of change through "children helping children".

## What does Free The Children do?

Free the Children supports sustainable development in Ecuador, Ghana, Haiti, Kenya, Nicaragua, Sierra Leone, India and rural China, and works around the world to empower youth to become more socially engaged.

Free The Children aims to equip young people with the resources, education, and inspiration to help transform the world from 'Me' to 'We'.

## What has Free The Children accomplished?

To date, Free the Children has made the following impact:

- Built 650+ schools and schoolrooms
- Provided education to 55,000 children every day
- Provided 30,000 women with economic self-sufficiency through alternative income programs
- Shipped \$16 million worth of medical supplies around the world
- Provided 1 million people with improved access to clean water, health care and sanitation

## How is Teck affiliated with Free The Children?

Since 2011, Teck has partnered with Free The Children as a National Platinum Sponsor of We Day to raise awareness about zinc deficiency. We Day is an annual youth

empowerment event that encourages students to take action on local and global issues to make the world a better place. Teck has educated more than 200,000 youth leaders about Zinc & Health through a range of engaging We Day campaigns.



Craig Kielburger reads with two children in Chimborazo, Ecuador.

## What is the impact of Teck's We Day campaigns?

### We Day 2011

Zinc & Health Battery Recycling Campaign

 **7,199**  
KILOGRAMS  
of batteries were collected  
as part of the initiative

Batteries processed at  
Trail produced

**1,368**  
KILOGRAMS  
of  
**ZINC**



This is enough zinc to provide zinc  
supplementation to

**526,153**  
CHILDREN  
FOR ONE YEAR



### We Day 2012

One Tweet, One Life Twitter Campaign

Our We Day tweet received

**22,640**  
RETWEETS  
*and reached*

**5,122,592**  
TWITTER USERS

to raise awareness about  
zinc deficiency



**11,320**  
LIFE-SAVING  
ZINC TREATMENTS

were provided to children in Nepal and Peru

### We Day 2013

Send One, Save One ePostcard Campaign

**3,240**  
ePOSTCARDS

were sent to recipients in **102** countries worldwide  
to raise awareness about zinc deficiency





# Educating Women about Nutrition in Kenya and Tanzania

Around two billion people—almost one third of the global population—suffer from micronutrient deficiencies, and in Kenya and Tanzania the impact of this issue has had consequences on both public health and the economy. According to a recent national health survey, approximately 35% of children under the age of five suffer from stunted growth, and at least half of all pregnant women in both countries are anemic. This has a detrimental effect on health, productivity and life expectancy.

International experts point to food fortification as the primary solution to this problem; however, reducing micronutrient deficiencies in these countries continues to be challenging. There remains a general lack of understanding around fortified foods, and many small- and medium-scale food millers lack the technical expertise required to enrich their products.

In 2013, Affordable Nutritious Foods for Women (ANF4W) was jointly implemented by the German government and chemical company BASF, along with additional support from private sector partners, including Teck.

ANF4W aims to increase the local supply and demand of affordable nutritious foods for women of reproductive age, with the goal of preventing micronutrient deficiency. Key activities include:

- Increasing nutrition awareness among women of reproductive age through social marketing
- Helping local food millers build technical capacity and better fortification technologies
- Providing local authorities with analytical framework to monitor the production and flow of staple foods
- Collaborating with relevant stakeholders on a communication strategy in order to raise awareness of fortified foods, dietary diversity and supplementation as sources of vital micronutrients

The ANF4W pilot will expand to Ghana and Bangladesh in 2015.



A mother walks with her son in Murang'a County, Kenya.

## Zinc-Rich Recipe Roast Chicken and Fennel

With Italian spices and toasted pine nuts, this flavourful recipe is nutritious, quick to prepare and contains 26% of the daily recommended value of zinc. One cup of fennel bulb contains 20% of the daily recommended value of vitamin C, which helps boost immune system health, and produces and repairs skin tissue.

Makes: 2 servings  
Prep Time: 30 minutes  
Total Time: 50 minutes

### Ingredients

- 1 large bulb fennel, cored and chopped (3 cups)
- 5 teaspoons extra-virgin olive oil, divided

- 2 tablespoons fresh rosemary leaves
- 1 tablespoon freshly grated lemon zest
- 2 cloves garlic, quartered
- ½ teaspoon freshly ground pepper
- ¼ teaspoon salt
- 4 chicken drumsticks, (1¼–1½ pounds), skin removed
- 2 tablespoons pine nuts
- 2 teaspoons white-wine vinegar

### Preparation

1. Preheat oven to 450°F.
2. Toss fennel and 2 teaspoons oil in a 9-by-13-inch baking dish. Bake for 10 minutes.
3. Meanwhile, place rosemary, lemon zest, garlic, pepper and salt together on a cutting board. Rock a chef's knife through the ingredients until they are minced into a fine paste. Transfer the paste to a small bowl and combine with 1 teaspoon oil. Rub the paste all over drumsticks.

4. Heat the remaining 2 teaspoons oil in a large nonstick skillet over medium-high heat. Add the drumsticks; cook, turning occasionally, until browned on all sides, 4 to 5 minutes.

5. After the fennel has roasted for 10 minutes, stir in pine nuts and place the browned drumsticks on top of the fennel. Return to the oven and bake until the fennel is golden and an instant-read thermometer inserted into the thickest part of a drumstick, without touching the bones, registers 165°F, 15 to 20 minutes more.

6. Remove the chicken from the pan. Toss the fennel with vinegar in the baking dish. Serve the fennel mixture over the chicken and enjoy!