

Through the Eyes of Many: Engaging People, Partners and Communities



PAYING IT FORWARD

Through the eyes of Karla Mills, Program Director, Project Development Group

Fifteen members of Teck's Emerging Leaders Program (ELP) from across the company visited Red Dog and nearby communities of Kivalina, Ambler and Kotzebue.

As we started our journey, we made a commitment which we shared through a values moment at the NANA offices. Our commitment was that we would approach our discussions and interactions with integrity and openness. We committed to being honest and asking our questions from a place of purity and a desire to learn. Our objective was to gain insight from a variety of perspectives around the topics of engaging our people, partners and communities from a Teck perspective.

As we worked toward trying to articulate what we took away from this experience, we thought about the best way to express our gratitude for the dozens of perspectives that we received during our short time. We concluded that the best way would be to pay it forward. That is, prepare this submission from some of our perspectives. Our hope is that through reading this, we have demonstrated that we have heard your many perspectives, and that we have learned.

Continued on page 2

Message from the General Manager

By Henri Letient



This is my last message as General Manager of Red Dog Operations. As you will know by now, I am talking on a different role within Teck, looking more broadly at Planning and Development for the Base Metals group. In that role, I will stay involved with Red Dog, focusing on advancing exploration of known mineral deposits within the Red Dog District, such as the Anarraaq and Aktigirug deposits on State Land, about 10 miles north of Red Dog.

2017 has been a successful year on many fronts. We started processing ore from a new pit, Qanaiyaq. While the metallurgical behavior of that ore proved to be a bit more challenging than we had anticipated, we quickly figured it out and made adjustments as necessary, finding the right blend to keep the mill humming nicely.

We continued our Courageous Safety Leadership journey, with the majority of our employees going through the CSL IV experience. The feedback from those sessions has been fantastic. The engagement created between crews and supervisors will advance our safety culture—working together to create a safe working environment, with every one going safe and healthy every day.

We initiated VIP2 (Value Improvement Project #2). This project, which will take two years to complete, is a major investment for Red Dog and will be very beneficial for its economic performance. When operational in Q1 2020, mill throughput will increase by roughly 15%, reducing site operating costs. With VIP2, we will also more fully utilize the mineral resource by allowing lowering of the cut-off grade to maintain the mine life to 2031-2032, depending on future metal prices.

We started 2017 with multiple storms and we finished the year with multiple storms. Mother Nature really challenged the mine and surface crews! Mountains of snow had to be moved each time. Miners became snow movers! Everyone responded well and most importantly, safety was always the top consideration. We did not have any significant incidents during any of these storm events.

Continued on page 2

Continued from page 1

Message from the General Manager

We had many visitors to Red Dog this year, including a fairly large group of “students”. Teck’s Emerging Leaders had the opportunity to use Red Dog as their classroom for a couple of days, including visits to Kotzebue, Kivalina and Ambler. As you will read in this newsletter, we left them with lasting impressions on all the good things Red Dog has to offer! This was truly a major step in their learning program.

I want to thank each and every one of you for your support in the past five years. We’ve made tremendous progress. There is plenty more to do, and always will be! However, as you have demonstrated over and over, the Red Dog Team is always ready and able. I will miss you! It is good that my new role will allow me to continue serving Red Dog. While maybe from further afield and you won’t call me Boss anymore, I will have other opportunities to contribute to the future success of the Red Dog Operations.

Continued from page 1

Through the Eyes of Many: Engaging People, Partners and Communities

RELATIONSHIP WITH NANA

Through the eyes of Ian Finke, Manager, Projects, Property Services and Business Improvement, Trail Operations

Describing the relationship between Teck and NANA is certainly not easy. It is clear from our conversations with various stakeholders that the relationship has developed and evolved over the years. From its somewhat aspirational beginnings (as told to us by Christina and Larry Westlake) to its status in 2017 (as described by both NANA and the Red Dog management team), the relationship is one defined by both commonalities and contradictions. For NANA, it’s clear that the relationship goes beyond simply a commercial arrangement to generate profits. For NANA, it represents a mechanism to generate economic benefits for their shareholders without compromising the ability of their people to maintain their subsistence way of life. It is about a desire to preserve their cultural values while at the same time responsibly developing the rich resources they have on their traditional lands. It is about maintaining their beliefs, their deep respect for their families, elders, nature, the land and the resources the land provides, all contrasted with the demands of running for a for profit organization.



For Teck, it is about being the operator, but acting as protector of the land. It is about operating 24-hours-per-day, while respecting the shareholders and their need to hunt and be with their families.

As part of our visit, we felt fortunate to meet and speak with Christina and Larry Westlake. Our conversation was noteworthy in many respects, but one thing stood out as a takeaway lesson regarding the NANA relationship — Christina’s words regarding her perspective of the Teck/NANA relationship.

“We at NANA feel very pleased and happy with the relationship we have reached with Teck... the agreement we have reached could serve as a reference for future agreements with other indigenous communities...”



Continued on page 3

Continued from page 2

Through the Eyes of Many: Engaging People, Partners and Communities

Her words highlighted her pride in what the two organizations accomplished, and speak to the power of what is possible as Teck and NANA look forward to the future.

Ultimately, we recognized through our visits and conversations that NANA and Teck share many common values and objectives. Like any relationship there are ups and downs, but we could clearly see the desire on both sides to understand each other's perspectives and align on common goals. We left with a sense of optimism that by adhering to their values, both parties would continue to strengthen the relationship, clearing the way for many more accomplishments down the road.



KIVALINA DISTINCT REALITIES

Through the eyes of Pawan Brar, Director Human Resource Services

I stared at this innocent little child as the wind tore into our faces.

A few hours earlier, I woke to my alarm clock in a beautifully furnished hotel room with all the amenities one could ask for. Per my usual morning routine, I drank 2 glasses of fresh water from the tap.

Hours later, I arrived in Kotzebue, Alaska approximately 1,000 miles north of Anchorage. I met with NANA leaders. I heard the story of Lori's father, Bob Baker, who was credited with finding Red Dog.

Still later, I arrived in Kivalina and stood across from this beautiful child named Claudia, who was smiling at me. I realized she didn't have some things that I took for granted, like running water or sanitary facilities. Many emotions filled my mind. I wanted to help this community. What can I do?

Then I started to question my initial assumptions. This was subsistence living. As I looked around, children were laughing and playing, doing all the things children should be doing. For the people of Kivalina, this was life. They were happy and this is home.

As I listened to the elders in Kivalina, my ELP teammate, Richard Whittington, asked the question, "We all have children. What advice do you have for us?" The elders' response was for us to look at the children in Kivalina and make company decisions as if these children were our own. Impactful and personal. The community of Kivalina welcomed us and opened their community to us to observe, ask questions and learn. They were our teachers and we were their students.

Elaina Ware said it best, "Kivalina is not an easy place to get to, and it's an even harder place to leave."

AMBLER – SHHH... QUIET IN THE LIBRARY

Through the eyes of Troy Jones, Director of Water

As we took off from Kotzebue in the Piper Navajo, we were told the weather was clear in Ambler and we should have no problem flying out of the community later that day.

This was the first of several contradictions we heard that day.

As we landed, heavy snowflakes began to fall and the first seeds of doubt were sown in our minds.

The plane that brought us here departed for Kotzebue with the promise to return.

As we toured the village, snow continued to fall and the clouds lowered. In an insightful question and answer session with the village elders and youth, we heard contradictions in individual and group perspectives, opinions, and beliefs.

We sat down to a meal of moose spaghetti, caribou soup, muktuk salad, with sub sandwiches and potato chips.



Continued on page 4

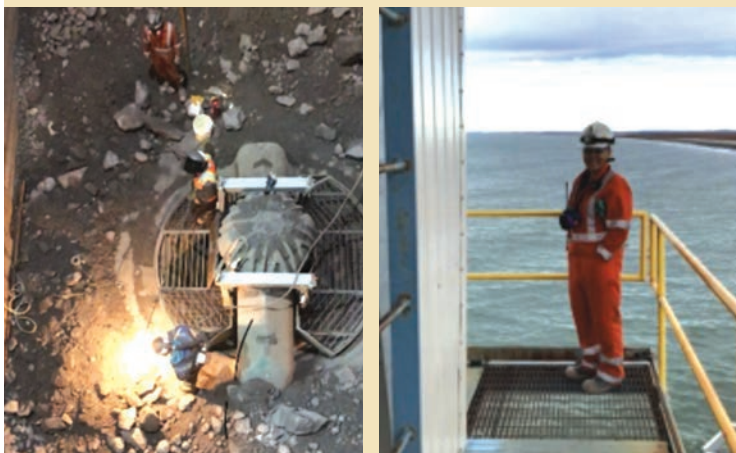
Continued from page 3

Through the Eyes of Many: Engaging People, Partners and Communities

As the snow continued to fall and deepen, we realized that spending more time in the village was entirely possible. When our flight back to Kotzebue was cancelled, the community rallied to provide us with blankets and mattresses, and we picked our spots to sleep in the school.

The effort put forth to make us, as visitors, feel comfortable for a night was impressive and a genuine desire to make us all feel at home was consistent from everyone.

I chose the fiction aisle of the library to spend the night. After the lights went out, we were lulled to sleep by the rumblings (AKA snoring) coming from the children's section. It wasn't so quiet in the library. One more contradiction, I suppose.



RED DOG: A UNIQUE AND SPECIAL OPERATION

Through the eyes of Manuel Novoa, General Manager, CDA

Getting to Red Dog is not easy. Even more difficult was the first sensation I felt when getting off the small plane that brought us from Kotzebue (Qikiqtagruk).

After a couple of failed flight attempts due to bad weather, I had thought of years past where I had been in camps and thought about life in them. As I sat in silence, pictures of my past experiences flooded my mind.

While the transport bus brought us to the Red Dog offices, I thought, will it be the same here as it was in South America?

Upon arriving at Red Dog, the first thing to attract my attention was the compactness of the facilities, as if everything had been designed to provide a cozy place, where things are close and where people can be seen at various times during the day.

A staircase with an interior tree gives a special touch. It provides an entrance to a place and says to me "here you will feel at home." Similarly, the dining room waited for us with a comforting and quick breakfast (since we were close to lunch time) along with warm rooms with everything necessary for a refreshing rest. Not to mention the amazing gym where we disputed an entertaining and well-fought game of soccer.

We had the tremendous opportunity to participate in various Red Dog employee focus groups. When asking about the main challenges for Red Dog, we heard about the high turnover. When analyzing that challenge, it certainly makes sense. Red Dog is so far from everything (so far from the world), and is a unique operation. Without a doubt, the main strength of Red Dog is its high-grade ore which generates much value with low treatment. But that is not its only strength. Red Dog's people are the foundation of the operation. People with a high sense of pride and belonging. Many of which have been working at Red Dog for decades.

I stayed a little longer than the rest of my ELP group and had an opportunity to learn a little more about what motivates RDO employees to work so long in this remote operation. I observed satisfaction on the faces of workers after they completed a critical job for the operation that was planned, done well and without incident. I perceived their sense of pride after they repaired a critical piece of equipment – the gyratory crusher – that had been stuck for hours by an uncrushable. I saw their sense of purpose and the importance of their work, which they exhibited by delivering the best of themselves day-by-day, always seeking to improve. And most importantly, I experienced their sense of family on the job.

No doubt the challenge of rotation is always present and shouldn't be forgotten. But the commitment of the employees who remain for many years is also present and is very strong, and that shouldn't be forgotten either.

Now if only someone could figure out that darn Internet connection...

ROUNDING IT ALL OUT: THE POWER OF LEADERSHIP AND ITS IMPACT ON OUR PEOPLE

Through the eyes of Daniel Parker, Acting Superintendent of Mine Operations, Line Creek Operations

My journey to Alaska is one that I will remember for many reasons, but the thing that sticks in my mind the most is the power of true leadership and how it can be harnessed to change lives of others for the better.

Continued on page 5

Continued from page 4

Through the Eyes of Many: Engaging People, Partners and Communities



This notion came about from my observations of many leaders we met throughout our journey and is exemplified by Larry Westlake.

Larry is a man from humble beginnings, who still emanates this humility. His leadership style begins with serving his family, sacrificing time with them to earn money to support them and keep them secure. He has turned his hand to everything to continue to support them. From equipment operator to dredge boat captain, from electrician to politician, he is a man that grew beyond the need to support his family and support his region.

His success in building ten schools and securing funds for an 11th has come from his vision and leadership — No matter what or how, we will succeed and the outcome will be even better than he could have hoped. Anything he does is not for personal gain, but to support and serve others — his people.

The key lesson that we all took away from our experiences is that when true leadership is present it can serve to improve the lives of many generations. No matter what you do, lead with purpose and a vision to align people for a brighter and better future. Above all... take the time to understand different perspectives.

Connecting with Communities

By Corinne Ward, NMS Red Dog Manager



In March 2017, I had the opportunity to be part of NANA Regional Corporation's Annual Meeting in Kotzebue, where I met many people from throughout the region and provided information at the NANA Management Services (NMS) booth about the work we do at Red Dog Mine.

I was also fortunate to make two recruitment trips in 2017 with the Red Dog Operations team – one in Noorvik in April and the other to Buckland in June. During the Noorvik trip, I spoke with students and conducted interviews during the day, and by late afternoon, we shared a delicious dinner with the residents. School was still in session, and it was fun to see the excitement of our visit on the faces of so many students and adults. Our trip to Buckland, though during summer break, had a great turnout for another round of interviews and a shared meal with village residents.

These trips allowed me to have face-to-face conversations with potential work candidates, and we offered jobs to several candidates that came out to interview. The importance of making that connection can't be overstated; it increases the productivity of our operations and continues the success of our valued partnership with Teck. I feel fortunate to have traveled throughout the NANA region – not only is the land beautiful, but I couldn't help but notice the tight-knit bonds of each community and the warm welcome given to us by the people. For that, I'm incredibly thankful.



Running the Race

Red Dog Business Improvement – Looking to 2018

By Chris Van Arsdale



Have you ever watched a NASCAR or Formula 1 race? The pit stops are a critical point in the race for each competitor, as an extra second in pit lane can be the difference between 1st place and 16th or worse!

But have you watched videos of old races? The pit stops could be measured in minutes! While changes in the rules have influenced pit stop times over the years, the crews have continually improved their processes to gain a competitive advantage.

A competitive advantage at Red Dog means strengthening the business so that it is profitable when zinc and lead prices are high or low. While prices are good today, now is the time to make changes while we have access to the resources we need, so that when prices go back down we are better prepared than other zinc mines. Safe production also means continually looking for better ways to do our work. This continuous improvement is important to all of us, as it provides support to the northwest arctic Alaska region and communities, and of course creates great careers and benefits for us and our families.



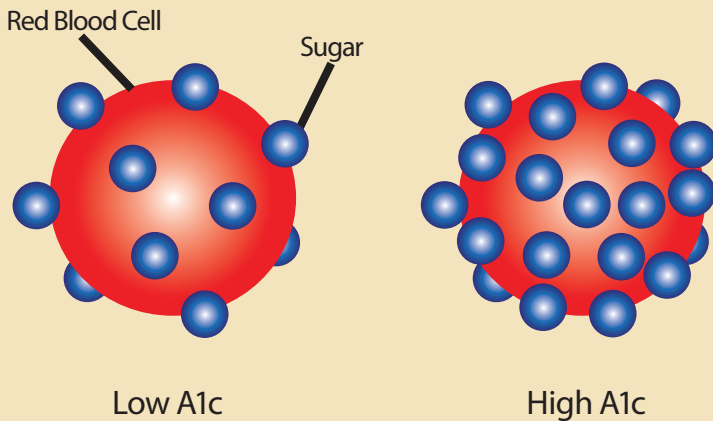
We can all contribute to a continuous improvement culture. To help implement improvement ideas, a new Business Improvement Idea program will begin in 2018. We encourage everyone to take a look at their work areas and develop ways to make things better. This will also provide a way to recognize people's efforts to improve Red Dog.

So how can you make your work area better? Improvements don't have to be big – they can be any size! Take a look through your work area; how can we work smarter and not harder? What are the things that you and your crew do every day that are a waste? Do you regularly wait on a tool or piece of equipment, or wait for someone else before you can do your work? Think of ways to organize your work to minimize waiting. Do we spend time looking for a tool for a routine job? We've all hunted for that darn 10mm socket! Think about how we can organize the workspace so the tool has a place and is in its place when it is needed. There are many more examples, but hopefully these can get you started on thinking how to make your work better.

Unlike a car race of a few hours, work and life at Red Dog is a long race of years; we must continually improve to achieve safe production that meets our goals. We look forward to seeing your ideas put in action to make Red Dog better!

Information on Reversing Diabetes Mellitus Type 2

By Clayton Langland, PA-C



I recently read an article from a highly respected medical journal that indicated that weight management (weight loss through diet and exercise) may reverse Type 2 Diabetes in some people. These people can return to a non-diabetic state with normal fasting blood sugars of 70-99 and an A1C of 6.5 or less. A high number in either of these lab tests indicates diabetes. After normal lab results for a couple of months, these people are no longer considered diabetic.

“What is an A1C?” you might ask. As molecules of glucose (sugar) float around in the blood stream, they gradually attach to a red blood cell — which can live for 2-3 months after which it is replaced. The higher the level of glucose (sugar) in your blood stream, the more glucose attaches to the red blood cell over those 2-3 months.

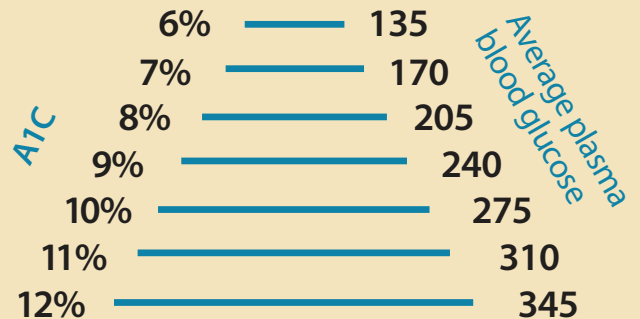
Through a laboratory blood test called an A1C, the amount of glucose attachment can be measured. This A1C number or value is an indicator of your average blood sugar over a period of those 2-3 months.

If an elevated level of A1C is found on your red blood cells, it indicates you have eaten a lot of sugar. The amount of A1C measured on your red blood cells is a reliable indicator of how much sugar you have eaten in the last 2-3 months — kind of like how a dog with the most chicken feathers on them has killed the most chickens.

If you have an A1C of 7.0 or higher, you are going to have more “feathers” sticking to you than someone who has an A1C of 5.0 or 5.5. Feathers don’t lie. For example, an A1C of 7% indicates an average plasma blood glucose level of about 170. An A1C of 6% indicates an average plasma blood glucose level of 135.

Prior to having their blood tested for glucose (sugar) levels, some people will stop eating sugary foods for a few days, to try to lower their blood sugar level. That’s why the A1C “feather” test is done. It tells the doctor if you have consumed too much sugar (or chickens) over the last 3 months — not just over the last few days.

A1C testing: How to compare



Enough about “sugar”. What does insulin do in the body? Well, it helps glucose (sugar) molecules pass through cell walls and starts the metabolizing process (breaking down sugar) for energy. If there isn’t enough insulin to move the glucose (sugar) molecule into the cell, the glucose stays in the blood stream in causing the complications of diabetes that are listed below.

AND ANOTHER BAD THING:

If the energy produced from the sugar isn’t used by the cell, it will eventually change into fat and be deposited in the body. This is another important reason to limit the amount of sugar you eat: your body will convert the sugar into fat.

The Diabetes Remission Clinical Trial found that remission of Type 2 diabetes was more likely among those who lost weight through proper diet and exercise. The study shows that the more weight the person loses, the more likely they are able to get rid of their diabetes.

WHAT DID THE STUDY FIND?

People who gained weight had 0% remission, or no “cures”. All 76 participants continued with diabetes.

People who lost weight in the amounts and percentages shown below, “cured” their diabetes.

0-11 lbs: 7% (6 of 89 participants) had remission of diabetes
11-22 lbs: 34% (19 of 56 participants) had remission of diabetes
22-33.1 lbs: 57% (16 of 28 participants) had remission of diabetes
33.1 or more lbs: 86% (31 of 36 participants) had remission of diabetes

31 of 36 persons who lost 33.1 lbs. were no longer diabetic.

Continued on page 8

Information on Reversing Diabetes Mellitus Type 2

These findings were not new to health care practitioners. They do confirm the fact that if you have a high blood glucose (or “sugar”), you need to do two things to possibly get rid of your diabetes. You need to LOSE WEIGHT through exercise and you need to EAT LESS SUGAR and CARBOHYDRATES by decreasing all types of sugars, sweetened cereals, flavored coffee drinks, canned fruit in syrup, or any drink containing fructose (Coke, Pepsi) and cutting back on breads, rice, bagels and milk fats. You might think “WHAT CAN I EAT?” – Try green vegetables, fatty fish, eggs, nuts, and non-fruit yogurt. See the lists at the end of this article for more good foods to eat in moderation. Yes, you can eat some foods on the “bad list”, but minimize their consumption.

Many diet and eating plans are available from your doctor and dietician. Two beneficial plans are at the end of this article.

Remember, in general, Type 2 diabetes is treated with diet and oral medications, whereas, Type 1 Diabetes is treated with insulin and diet control. The diagnosis of the exact cause of diabetes can be complex as it may not be due to one cause. Anyone with either type of diabetes, or “high sugar,” should see their personal Health Practitioner for advice and treatment recommendations before starting any type of self-directed treatment.

Given the results of the trial, the researchers feel that the remission of Type 2 diabetes is possible through weight management. If you are already taking insulin, you may need to continue, but weight loss is beneficial and should be discussed with your doctor.

To understand why weight loss is an important factor in diabetes remission, we need to understand the relationship between having a large body mass (being overweight) and being diabetic.

Diabetes occurs when the pancreas cannot make enough insulin keep up with the needs of a body’s mass. You may weigh 200 pounds, but only make enough insulin for a 170-pound body. If you lose 30 pounds, you will have enough insulin for your body and your “sugar” levels will return to normal. Maybe you weigh 250 pounds and should

weigh 170 pounds. That’s an 80-pound difference. No one said this would be easy. It takes time and much self-control in your eating as well as exercise.

HIGH BLOOD SUGAR COMPLICATIONS

What are the adverse effects to your body if you have high blood sugar for years? It harms the small blood vessel of your eyes (loss of central eye vision), kidneys (destroys the filtering mechanism) and heart (heart pain, angina and heart attacks), contributes to high blood pressure which leads to strokes and aneurysms (rupturing of blood vessels), causes damage to nerves (especially of the feet) and causes blockage of vessels going to the feet leading to possible amputation. If you smoke or chew tobacco, all of these affects are even worse.

The researchers “strongly support the view that Type 2 diabetes is tightly associated with excessive fat mass in the body” and suggest that “based upon these findings, weight loss should be the top priority in Type 2 diabetes treatment.”

The researchers continue by stating, “Our findings suggest that even if you have had Type 2 diabetes for six years, putting the disease into remission is feasible. In contrast to other approaches, we focus on the need for long-term maintenance of weight loss through diet and exercise and encourage flexibility to optimize individual results.”

One researcher noted, “Anti-diabetic drugs alone seldom result in normalization of glucose metabolism if patients’ lifestyles (eating habits and level of exercise) remain unchanged.” Just taking diabetic medications are not enough. You must change your lifestyle through eating habits and exercise if you want your diabetes to go into remission.

The complete article can be found at:
https://www.medpagetoday.com/endocrinology/diabetes/69657?xid=nl_mpt_Weekly_Education_2017-12-13&eun=g5336096d1r

A1C picture from:
<http://whatdiabetes.com/what-in-the-world-is-an-a1c/>

Continued on page 9

Suvisi (Sü-vĩ-see) in the Iñupiaq language means:

“What are the many people doing?”

Information on Reversing Diabetes Mellitus Type 2

Pre Diabetes

5 BEST FOODS & REMEDIES

Steps to Reverse It

How to:



Avoid Greasy Foods



Steel Cut Oats No Instant



High Fiber Low GI Foods



Legumes Control Sugar Spikes



8 Hours Sleep



50% Veggies 25% Grains 25% Lean Meat



Whole Grains Reduce LDL too



Bye Bye Tins / Soda



Low Fat Meats Fish



Lots of Healthy Greens



Bitter Melon



Cinnamon Increases Natural Insulin

More Prediabetes Foods to Go... And Diabetes Diet Plan...

@ Forhomeremedies.com

Foods for Type II Diabetes

Diabetes is a problem with your body where you have a high level of blood sugar than the standard. This is usually known as hyperglycemia.

Reasons for Type II Diabetes

- Over Weight/ Obesity.
- Unhealthy meal planning.
- Lack of insulin.
- Genes.
- Excess glucose in your Liver.
- Lack of communication in your blood cells.
- Broken Beta Cells.

Symptoms of Type 2 Diabetes

- Excessive Hunger.
- Fatigue.
- Increased Thirst.
- Poor Wound healing.
- Frequent urination, etc.

Breakfast for Diabetic Patients

- cereal with skimmed milk
- whole grain toast spread with jam
- low fat yogurt with fruits

Lunch for Diabetic Patients

- Chicken, Salmon Fish.
- Pasta.
- Pizza.
- Low Fat Yogurt.
- Hearty Soups.
- Veggie Stir-Fry

Dinner For Diabetic Patients

- Chicken and White Bean soup.
- Apple and Fennel Roasted Pork Tenderloin.
- Eggs.
- Veggie Flatbread, etc.

Diet for Type 2 Diabetes

Carbs to maintain good Sugar Level

Adding Carbs to your plate is good for Type 2 diabetes. These foods will have the good effect on your sugar level than the fats and proteins.

Can I eat Fiber foods to control Diabetes?

If you can't get the fiber in your food, you can also take fiber supplements to get enough energy and control the type II diabetes.

Should I Avoid Salt to Control Diabetes?

Even some people will have the problem with salt. So it is better to control the salt intake to salt in your plate if you are salt sensitive.

Proteins to Control Over the diabetes

Having proteins in your will help you to manage blood sugar levels. Most of the people will lack proteins which lead to various health problems.

- Plant based proteins Fish.
- Seafood.
- Chicken.
- Other poultry Cheese and Eggs.

How much Whole Grains should I take for Type 2 Diabetes ?

Consuming 3-4 ounces of whole grains a day is good for leading a healthy life. Here we have provided the some list of whole grains.

- Brown Rice.
- Bulgur.
- Oats.
- Millet.
- Buckwheat.
- Wheat Berries.

Vegetables – A simple diet for Type 2 Diabetes

Having a good food on your plate is excellent. What will be the good food other than vegetables? Here we have provided the list of vegetable that should add to your plate to control the type 2 Diabetes.

Fruits – A diet for Type II Diabetes

Eating fruits is good for health. You can eat the fruits that contain antioxidants. But it is suggested to avoid fruit juices. Because they contain natural sugars in high level as well as they contain less fiber than the whole fruits.

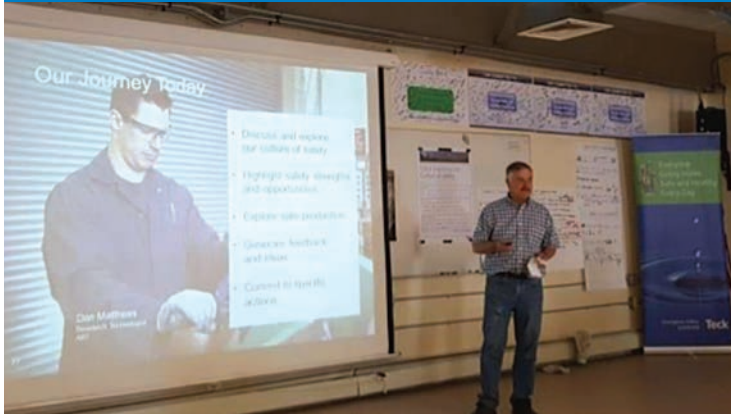
Dairy Products as food for Type II diabetes

Regular intake of full dairy products or low fat dairy products will reduce the risks of Type II Diabetes. But the problem is how to add milk products to get the low risk of diabetes.

www.healthcenter.io

Continuing The Courageous Safety Leadership Journey

By Scott Leighton



2017 has come and gone, and although we had our challenges we had our successes as well! One of the successes was the introduction of next step in our Courageous Safety Leadership journey. Our journey began in January when a gentleman from Intertek Training arrived to site to introduce the senior leadership team to CSL IV. Many had asked before his arrival "What is this going to look like?" "How will it be communicated?" and "What will be different than the previous CSL sessions?" It did not take long before we understood what it was going to look like, how it was going to be communicate and how it was new and different from previous sessions.

As all would soon discover it is made up of six sections, "Our CSL Journey", where we looked at where we began our journey and the progress we have made. "Strengths", exploring what we do well and how can we use those strengths to promote improvement. "Opportunities" identifying what maybe we aren't doing so well in and what can be done to improve. "Safe Production", exploring the concept that safety or production will not get us where we want, rather it is safety and production together will support us in achieving our vision of Everyone Going Home Safe and Healthy Every Day.

CSL IV is a different approach than the previous CSL sessions; it is facilitated by team leaders down through the operation to their individual teams each identifying where they can influence change. Work teams of all levels and backgrounds came together to support one another; providing facilitation training, practice sessions and ongoing support.

The concept of identifying as an individual team their strengths and opportunities and what they could do as a team to influence change was embraced. There was enthusiasm and participation which resulted in several great commitments being made. Those commitments were captured on posters and personal commitment cards. The posters are displayed in team work areas all across the operation and commitment cards are kept where folks can review and reflect on their team and individual commitments.

In the end Courageous Safety Leadership IV was received very well by leaders and the workforce. 95 percent of the Red Dog team participated in this phase of the journey. However this is a continuing journey and there is still farther to travel. We must continually check in with the commitments made and determine are we on track, do we need to refocus, or have we accomplished what we committed and are ready for a new commitment. Make safety personal and commit to doing the right thing at the right time for the right reasons.

Courageous Safety Leadership Guiding Principals

- I am responsible for my safety and the safety of those around me.
- I am empowered to be courageous. I must speak up if my safety or the safety of those around me is affected or can be improved.
- My values, beliefs, attitude, behaviors and actions have an impact on me and on others, both at work and at home.
- A safe operation is a productive operation.
- We achieve excellence in safety through a positive culture of safety and strong technical programs.
- Safety is a core value at Teck and will not be compromised for any reason.

How to be a Red Dog Shipper

By Bert Adams

When a cylinder for a 993 must be shipped out, you think of the warehouse. When you need to send an envelope to Canada, you think of the warehouse to make sure it happens.

Requisitions and shipping notices are prepared by the Purchasing Department and the end users, then all the information is brought to our shipper who is on-site for this task.

Materials Management currently has six qualified shippers, and two in training. Joleen Newlin is tasked with training the two new shippers. Joleen has two years of experience being a Red Dog shipper. As with all materials management personnel, Joleen's assigned duties can change from week-to-week based on business needs.

Joleen connects your shipment with Northern Air Cargo, FedEx, UPS, Alaska Airlines Goldstreak, and/or Lynden Cargo. She creates airway bills which are formulated in a system, and makes sure your shipment reaches its destination.

Our shippers also must be international shipping experts, filling out all applicable customs and duties documents to ensure your shipment can safely and legally cross international borders.

Joleen weighs your items, makes sure they are secured to a pallet, and puts labels on your items. She lets our Anchorage-based couriers know what is coming to them. She makes sure everyone who handles this shipment, knows if it's hazardous or non-hazardous.

Being a Red Dog shipper is no easy task. Every department, including yours has something that needs to be shipped out. It may be a simple envelope, or a large 777 engine. Either way, Joleen will get the job done for you.

Joleen states, "I like helping happy customers and people willing to work with me so their items are delivered to its destination. It can be overwhelming with core returns, and repair and returns that arrive to the shipping area. Being a Red Dog shipper is exciting, but a lot of work is involved in the process of shipping items out of Red Dog."

The Warehouse group and its shipping staff take great pride in making sure your shipment gets in and out of Red Dog safely and productively. This is just one of many important and necessary behind-the-scenes tasks at Red Dog.

Quyaana

*Thank you to all who
contributed to our newsletter.*

To submit topic ideas or an article about your work, a coworker spotlight, a special project or life at Red Dog, contact Managing Editor, Verna Westlake at verna.westlake@teck.com or communityrelationsRDOG@teck.com

Unearthed Hackathon

By Allyson Stoll



Teck Resources in Vancouver, BC, recently sponsored the Unearthed Hackathon in Vancouver with another company, SSR Mining.

Unearthed is a 54-hour, open innovation event where teams develop prototype solutions to some of the resources sector's most challenging problems.

Hackathons are touted as "big data" analysis events, where data sets range from under 1 gigabyte (GB) to upwards of 30 GB or larger.

The teams selected from three challenges and data wasn't provided until the start of the challenge. The participating teams

consisted of software developers, engineers, designers and industry insiders. These teams had access to industry data and experts assisted them in developing new technologies. Unearthed is unique in that teams and participants own whatever they create at the hackathon.

Red Dog Operations, Teck Alaska, supplied one of the three challenges: improve flotation circuit performance through measured froth characteristics. This challenge used information from the VisioFroth flotation cameras that were installed in January 2017. These cameras have been collecting information about the froth in the zinc rougher circuit since their installation. By relating this information to when the concentrator was experiencing high mineral recovery, ideal operating parameters could be determined. This will help Mill Operations maximize resource recovery.

Sixteen teams, ranging from two to over six people, primarily from British Columbia, competed for technology prizes, cash and Amazon Web Services credits. People came from all sorts of varied backgrounds and age groups. There were mining engineering and computer science students, programmers, graphic designers and visual artists, and even a metallurgist on the teams. Subject-matter experts were provided as mentors to the teams. Mentors helped teams understand the data so they could perform their analyses and develop solutions to the challenges.

The group shown in the photo (page 1) is the Data Buds and hackathon judge, Umberto Fugiglando. The Data Buds selected the flotation circuit performance challenge and won the Young Innovator's award at the competition. They created a model that reasonably predicts the zinc recovery based on input parameters from the froth cameras. Red Dog Operations is currently investigating whether to implement this model.

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