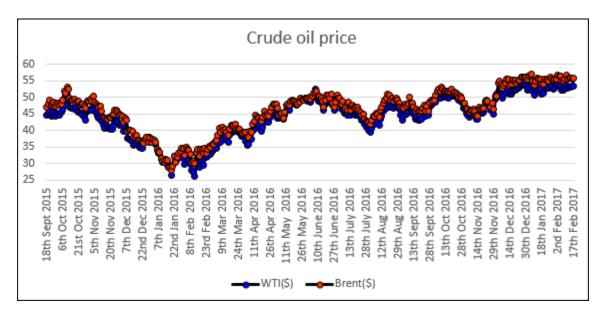
www.chopraseismic.com Calgary, Canada

Some of the news items for this week are as follows:



- The US inventories and shale production have been on the rise, and this has prevented the crude oil price from escalating. The price fluctuated between \$50 and \$55.
- According to IEA, OPEC implemented 90% of the promised cuts in January 2017, which is a good start to a process supposed to last for 6 months. In fact this is the best compliance by OPEC in its history. OPEC and Russia are leading this initiative to end the three year oil surplus in the market, which has made the oil prices come up by 20, since the agreement was made (Nov 30th, 2016). As per the IEA, the world's oil inventories will fall by 600,000 b/d during the first half of the year, if this agreement goes through as it has started. 2017 will be an interesting year as besides the OPEC reductions, the non-OPEC production is expected to increase by 400,000 b/d due to gains in Brazil, Canada and the US. Saudi Arabia has cut production by a maximum amount in the last 8 years, and is beyond what it promised in the OPEC agreement. It reduced its production by 717,600 b/d last month to 9.748 mb/d. As the compliance rate rises, the crude price will go up further.
- According to IEA, besides the OPEC compliance of its agreement, and the non-OPEC countries
 voluntarily agreeing to curtail their crude output, the global oil consumption is also rising. This is
 due to the economic expansion in China and India, a fact that is being overlooked due to the
 focus on OPEC reduction and the US shale oil output increase.
- Iraq's crude shipment rose 3% in the first half of February 2017, even as OPEC is set to reduce output. Over 122,000 b/d more were pumped out as the exports touched 3.93 mb/d in the first 15 days of this month. The country had pledged to decrease production by 210,000 b/d from its 3.91 mb/d production in Oct 2016, the baseline month OPEC set in its agreement. The exports for the full month may not end up as an increase, as high winds and rough seas usually interrupt

loading during the winter months. The maintenance at some of the Iraq's biggest fields may be another factor that will help it meet its pledge.

- Kuwait is planning to add 0.5 mb/d to its production capacity when the OPEC agreement expires
 at the end of June 2017. KOC current level of production capacity is 3.17 mb/d. KOC CEO Jamal
 Jaafar said in an interview that his company will add this capacity even if OPEC agrees to extend
 the agreement beyond June 2017.
- Nigeria has estimated that it has lost as much as \$100 billion in revenue in 2016, due to attacks by militants in the oil rich Niger Delta. The country's production fell by 1 mb/d to 1.2 mb/d.
- Libya, exempted from the OPEC agreement has been trying to boost its production. Between September 2016 and January 2017, the country's production climbed from 300,000 b/d to nearly 700,000 b/d. This production increase is expected to increase to 1.2 mb/d by Q4 2017. Libya was producing nearly 1.8 mb/d before the Arab uprising began.

So much for the industry news this week.

For the lighter side this week

Last week our daughter, who is a doctor, had come home for a short break. It had snowed on and off for a few days while she was here, and the temperature had dropped considerably. At the weekend we had gone out shopping and had to walk a short distance in the cold to get to our car. As she works in a warmer place I had expected her to feel the cold more than we do here in Calgary, but she was taking it well. When I asked her about it, she casually mentioned that she probably has more 'brown' fat than 'yellow' fat. I was not aware of this difference, and so tried to follow it up.

We usually understand fat as implying huge beer bellies, backsides, thighs or hips, which make people supporting them look overweight, and they also feel lethargic, not-very-agile or smart-looking. Fat in our bodies stores excess calories that can be utilized when we feel hungry. It releases hormones that controls the metabolism in our body. But there are other types of fat also. When an overweight individual is concerned about losing weight, the reference is obviously being made to 'white' or 'yellow' fat.

White fat is composed of a single lipid (or fat) droplet with little mitochondria (which refers to the cell's heat-burning engine), and fewer blood vessels. This fat originates from connective tissues and serves as a thermal insulator and cushion for our internal organs. White fat content in the body increases when the body consumes more calories than what it is expending. In short overeating increases white fat in our body.

Brown fat is composed of several small lipid droplets and a large number of iron-containing mitochondria and blood vessels. The iron gives this fat its brown colour. Brown fat is found in the front and back of the neck and upper back. Overeating not only increases the white fat in our bodies, but also makes the brown fat somewhat dysfunctional, and so not able to burn calories.

Newborn babies have higher levels of brown fat located in the upper half of the spine and over the shoulders, which keeps them warm. These levels gradually drop with age. The main function of brown fat is to generate body heat. Thus humans with higher levels of brown fat would take longer to begin shivering in the cold.

Overweight individuals have more white fat and less brown fat.

Individuals who have more brown fat have normal blood sugars compared with people who have less brown fat. When we exercise, the white fat gets converted into brown fat, and that is why the doctors suggest exercising to obese patients.

Another factor that helps production of brown fat is getting enough sleep, as high-quality sleep leads to optimum production of melatonin (a hormone produced in the brain and helps regulate the sleep and wake cycle).

Individuals who consume more calories than are required by the body, add on white fat, and excess of it in the body can lead to heart disease, diabetes, and even cancer. One way to watch the white fat in the body is to keep an eye on the weight.

The doctor's suggested mantra for good health is eating wholesome food in the correct amount, staying active, avoiding stress and remaining happy.

Another interesting fact is that the levels of brown fat in the body decreases with age, which makes it difficult to stay slim, unless a conscious effort is made to do so. That is why it is important to watch your food intake, maintain weight and stay active.

Scheduled eating also helps in keeping your food intake, instead of being a compulsive eater. This is because the body can shift from carbohydrate burning mode to fat-burning mode, which will help you remain trim.

I hope you find this interesting.

Did you know?

... how to squeeze the maximum juice from a lemon?

Squeezing out juice from a lemon could be a tricky skill, whether you do it with your hand or use a squeezer. And then faced with the challenge of getting the maximum juice out of it may come across as something that may not go down well. Here is what you could do:

- 1. Take the lemon out of the refrigerator and let it sit out for some time so that it comes to room temperature. This will thaw and soften the membranes inside the lemon, which are somewhat rigid when the lemon is in the refrigerator.
- 2. Microwave the lemon for 20 seconds. Microwaves excite the water molecules in the lemon making the flesh softer.
- 3. Roll the lemon on the kitchen table, care being taken that you do not exert too much force that it bursts.

Now, when you squeeze the lemon, you will notice that you can squeeze more juice out of it.

Interesting? Isn't it? ©