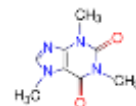


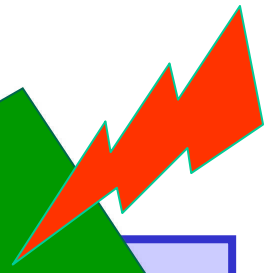


**A Success Story, hopefully
with a Happy End!**

**Thanks to
SWISS FOOD RESEARCH**

**Presentation
SFR Members Assembly
in Zollikofen / March 15, 2017**



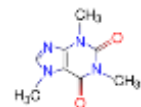


**A Success
with a F**

In the middle
of an expedition,
initially considered
as being
"impossible"

**THE
SWISS FOOD R**

Presentation
SFR Members Assembly
in Zollikofen / March 15, 2017



Content

The stages of the expedition:

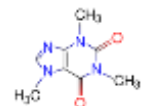
- **1994**
- **2003 - 2007**
- **2007 - 2009**
- **2009**
- **2010 (2010 – 2014)**
- **2015 (2015 – 2017)**
- **2017 -**

1994

I became responsible for the
Infré operations

Infré SA

Today Europe's leader for the decaffeination of tea
(with a market share of 60% in the UK)



1994

The positive:

Identification with Infré's products

(Tea healthy, No. 2 of purchased drinks after mineral water)

The negative:

Need of a chemical solvent

to produce a high quality decaf tea

(although the solvent is accepted in the food industry!)

1994

My dream:

Natural decaffeination of tea
without any “chemistry”

The problem:

Infré SA had no research lab

1994

My analysis of the situation:

Mount Everest 8850 m

Wishful thinking:



City dweller wants to climb the highest mountain of the world with no training and no special equipment!

Crazy!!

2003 - 2007

Planning and construction of the new factory at Semsales:

Mount Everest was too great a challenge



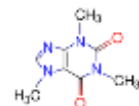
**A production line using the
traditional chemical solvent
was installed**

2007 - 2009

**The dream remained a dream until
one day (in 2009), when**



**appeared, linking Infré SA to
a super team of ZHAW
(Institute for Food and Drink Innovation)**

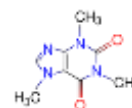


2009

The dream popped up again!



March 15, 2017 / MH



2009

The dream popped up again!

**Decision to at least
have a look at Mount Everest**



**Participation in the
SFR call 2009**

2009

Participation in the "SFR call 2009"

Rather easy hike,
with no special training or special equipment.
(No major financial commitment was needed)

CHF 16'000
from SFR for the preparation of the call.

2010

The “SFR call” was successful!

CTI experts encouraged to submit
a CTI application.

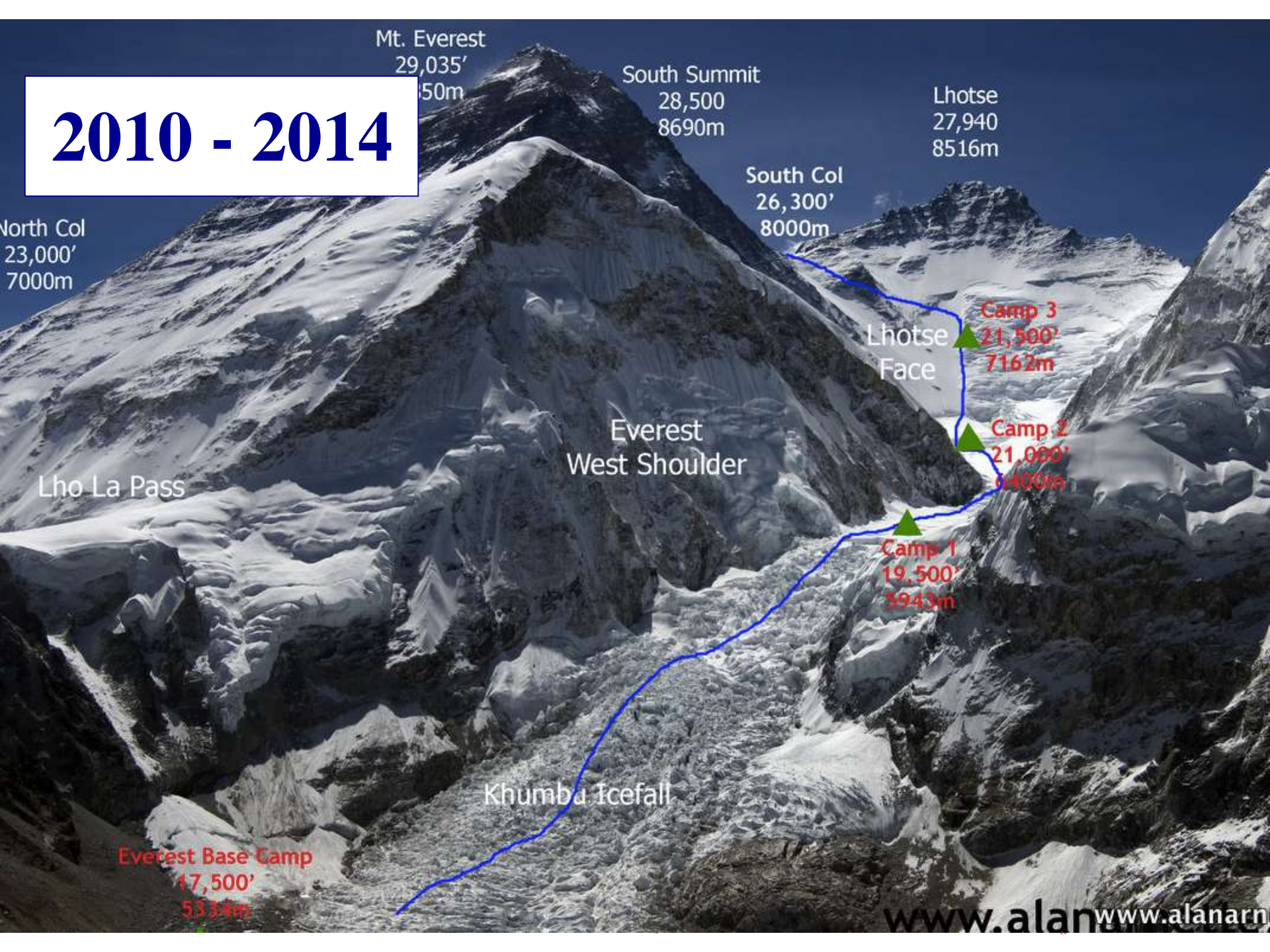


We got the CTI-support!

Name of the project:

„Natural decaffeination of tea“

2010 - 2014



2010 - 2014

Mt. Everest
29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col

North Col
23,000'
7000m

**We had arrived
at base camp!**



Success at lab scale!

(Naturally decaf tea of acceptable quality!)

**"The hunger for more
had awakened!"**

Lho La Pass

Khumbu glacier

Everest Base Camp
17,500'
5334m

2010 - 2014

The financial aspects of the first CTI-project

Contribution CTI : 435'000

Contribution Infré SA
Salaries : 245'000

Contribution Infré SA
Cash-out : 186'000

2015



**Second CTI project (at prototype scale)
has been approved by CTI**

Support of a second industry
partner was needed.



ferrum

has joined the team

2015

Mt. Everest
29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

North Col
23,000'
7000m

Lho La Pas

Next big challenge: Khumbu Icefalls



Installation of a prototype process in a
Streetbox (rentable space)
near the Infré factory

Khumbu Icefall

Everest Base Camp
17,500'
5334m

2015

Mt. Everest
29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col
26,300'
8000m

North Col
23,000'
7000m

Lhotse
Face

Camp 3
21,500'
6552m

Everest
West Shoulder

Camp 2
21,000'
6400m

Lho La Pass

Camp 1
19,500'
5943m

Khumbu Icefall

Everest Base Camp
17,500'
5334m

2015 - 2017

Today a prototype plant is operational in Semsales

Two ZHAW research collaborators, supported by Infré's own personnel, carry out **on a weekly basis** decaffeination trials in the Streetbox.

2015 - 2017



Mt. Everest
29,035'
8850m

South Summit
28,500'
8690m

Lhotse
27,940'
8516m

South Col
26,300'
8000m

North Col
23,000'
7000m

Lhotse
Face

Camp 3
21,500'
7162m

Camp 2
21,000'
6400m

Camp 1
19,500'
5943m

Everest
West Shoulder

Lho La Pass

Khumbu Icefall

Everest Base Camp
17,500'
5334m

2015 - 2017

Mt. Everest
29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col
26,300'
8000m

North Col
23,000'
7000m

Lho La Pas

**We managed to cross the
Khumbu Ice Falls!**



Naturally decaffeinated tea at “20g-level”
considered by key customer as
“you are on the right track”



Khumbu Icefall

Everest Base Camp
17,500'
5334m

2015 - 2017

The financial aspects of the second CTI-project

Contribution CTI:	517'000
Contributions Infré SA and Ferrum salaries:	290'000 *
Contributions Infré SA and Ferrum cash-out:	270'000 *

* Estimated figures, final financial report not yet drawn up

2017 - ?



Mt. Everest
29,035'
8850m

South Summit
28,500'
8690m

Lhotse
27,940'
8516m

South Col
26,300'
8000m

Lhotse Face

Camp 3
21,500'
7162m

Camp 2
21,000'
6400m

Camp 1
19,500'
5943m

Everest West Shoulder

Lho La Pass

Khumbu Icefall

Everest Base Camp
17,500'
5334m

2017 - ?

Mt. Everest
29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col
26,300'
8000m

North Col
23,000'
7000m

Lhotse
Face

Camp 3
21,500'
7162m

Camp 2
19,500'
5944m

Lho La Pass

Next goal: South Col



Installation of a **pilot plant**.
Gather necessary experience
for final ascent.

Khumbu Icefall

Everest Base Camp
17,500'
5334m

2017 –



29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col
26,300'
8000m

Camp 3
21,500'
7162m

Lhotse
Face

Camp 2
21,000'
6400m

Everest
West Shoulder

Camp 1
19,500'
5943m

Lho La Pass

Khumba Icefall

Everest Base Camp
17,500'
5334m

2017 –

Key Team remains together for ascent to South Col (construction of a pilot plant, 0,5 t/shift)

ZHAW-representatives are engaged, one as a consultant and two as part-time employees of Infré SA

29,035'
8850m

South Summit
28,500
8690m

Lhotse
27,940
8516m

South Col
26,300'
8000m

Lhotse Face
Camp 3
21,500'
7162m

Camp 2
19,000'

Lhotse

Everest Base Camp
17,500'
5334m

2019 ? – 2021 ?

Mt. Everest
29,035'
8850m

South Summit
28,500'
8690m

Lhotse
27,940'
8516m

South Col
28,300'
8620m

North Col
23,000'
7000m

Camp 3
21,500'
6552m

Camp 2
21,000'
6400m

Camp 1
19,500'
5943m

Everest
West Shoulder

Lho La Pass

Khumbu Icefall

Everest Base Camp
17,500'



2019 ? – 2021 ?

Mt. Everest
29,035'
8850m

South Summit
28,500
8790m

Lhotse
27,940
8516m

South Col
28,300'
8690m

North Col
23,000'
7000m

Camp 3
21,500'
7162m

Camp 2
21,000'
6400m

Final Ascent !

**Commercial production and sale
of naturally decaffeinated tea**



Everest Base Camp
17,500'

Without



**we would not have even seen
Mount Everest from a distance.**

Zürcher Hochschule
für Angewandte Wissenschaften

Without



Life Sciences und
Facility Management

ILGI Institut für Lebensmittel-
und Getränkeinnovation

and



**we would not have crossed
the Khumbu Icefalls!**

THANK YOU

to all the people involved in this project!

Thank you to SFR and CTI,
and thank you for your attention.



Let's keep our fingers crossed...
to get to the top!