Readers will likely remember Dr Klaus-Dieter Bastendorf from the first edition of prevention, which introduced the dentist from near Stuttgart in Germany and his modern views on prophylaxis. Six months later, the retired dentist shows no signs of quitting. Every day, he and his daughter champion lifelong oral health together, explaining the importance of staining in biofilm management to peers, among other things.

Few dentists speak so convincingly and with such scientific sense when it comes to air polishing and the use of erythritol as the powder of choice for biofilm removal. Few dentists profess with such passion that biofilm-induced diseases such as dental caries and periodontitis can be prevented relatively easily through a combination of recall, motivation and the latest powder technology. And few dentists know that any patient seriously questioning whether two professional tooth cleaning sessions and four new toothbrushes a year are really necessary should look 10,000 km to the south-west first.

While we in western Europe often stumble on our way to achieving modern prophylaxis, the road is much rockier in remote Pucyura, located in central Peru, almost 3 hours drive west of the city of Cuzco. In the Andean villages at an altitude of between 2,000 and 4,000 m, people still speak Quechua. Life seems wretched and modest—most of the inhabitants live in clay brick houses without glazed windows. The trip to school sometimes takes 4 hours—each way. This remote location in South America experienced a dental miracle, in which Bastendorf played a significant role.

However, it is Margit and Uwe Meyer who actually deserve the credit. The youthful couple from southern Germany have been working with children in need for
years and support the non-profit children’s charity Plan
International. Uwe Meyer is a member of the board of
manufacturer of medical devices EMS based in Nyon in
Switzerland, known for its brands AIRFLOW and PIEZON.
In coordination with the aid organisation, the couple
visited their godchild Diana in January 2011 to do more
for the girl. At the village school, they both noticed a girl
who constantly hid her chin with both hands. Her name
was Guisela Ccanihua, 16 at the time, four years older
than her classmates, but smaller and more delicate.
When the Meyers approached the girl and spoke to her,
they were shocked with her appearance.

Two hours to eat a roll

Guisela could have had a happy childhood, but an ac-
cident changed everything. When she was 4, she slipped
while tending sheep, fell on her chin and broke both
temporomandibular joints. The first aid station 4 hours’
walk away merely stopped the bleeding, but did not pro-
vide any further treatment. The fracture healed poorly,
cause inhibiting mandibular growth and the adhesion
of the temporomandibular joints. As the years passed,
her ability to open her mouth became increasingly re-
stricted. Ultimately, this was limited to 5 mm. It took her
2 hours to eat a soft roll. The girl’s face was severely
deformed and asymmetrical, and she suffered from mal-
occlusion and severe respiratory problems. Daily oral
hygiene was out of the question. The child’s family hid
her for a long time, but in the end, she started school,
albeit four years late.

Back in Germany, the Meyers considered how they
might help the girl. As time passed, the memories of
Guisela remained.

One night in 2011, orofacial and orthodontic spe-
cialist Dr Konrad Wangerin was interviewed by the SWR,
a regional public broadcasting corporation serving the
south-west of Germany, about new temporomandibular
joint treatments and the work of his sponsoring asso-
ciation, Förderverein Faziale Fehlbildungen [foundation
for facial malformations]. Wangerin is one of the world’s
leading specialists in the field of oral and maxillofacial
surgery. His association has been giving children all over
the world new faces since 1997. All the treating doc-
tors waive their fees, with sponsors and donations cov-
ering the costs. The donations arrive in full where they
are needed, and even the administration is performed
by volunteers.

One night, Uwe Meyer, unable to sleep, was skip-
ping through the channels and happened to see a rerun
of the interview with Wangerin. Insomnia is rarely con-
sidered a boon, but fate evidently intervened in this
instance. Meyer called Wangerin and told him about
Guisela. The Stuttgart-based specialist said that he
might be able to help her, but would have to take a look
at her himself. This is exactly the man I’m looking for,
Meyer thought after the call.

As luck would have it, Wangerin was planning a trip to a
convention in Chile and would make a stopover in Cuzco.
He and Meyer met for the first time in a hotel on the out-
skirts of town. It was 5.30 p.m. on 24 October 2011 when
Guisela met the maxillofacial surgeon too. The diagnosis
did not take long: post-traumatic ankylosis and a total
restriction of mandibular mobility. The ends of the lower
jaw had fractured, causing the entire posterior region of
the jaw to ossify—an exceptionally difficult and very rare
case even by European standards. And yet, Wangerin
was able to and had to help Guisela. “Otherwise she
would have been permanently limited to a liquid diet and
her ability to communicate would have been disrupted
for life,” said Wangerin, looking back.

While self-motivation, instruction and recall can change
the oral health of western European patients, it was fate
and coincidence that changed this Peruvian girl’s life.

Potato graters and organ theft

Barely three months later, Guisela and her mother,
Lorenza, landed in Germany. Their arrival soon attracted
the attention of the local press. A Peruvian woman liv-
ing nearby cooked for and spoke with Guisela and
her mother. A Spanish-speaking speech therapist got
in touch and a psychologist was already there to help
Guisela in the clinic. Wangerin’s team opted to perform
the surgery at the Paracelsus hospital in Ostfildern-Ruit
near Stuttgart.

The entire time, Guisela and her mother stayed on the
Bastendorfs’ farm in Eislingen between Stuttgart and
Ulm. While her daughter was undergoing treatment,
Lorenza learned new recipes, better ways to cultivate
the family’s potatoes, and about the respectful interaction
between men and women. Sometimes a potato grater
is all it takes to permanently improve a person’s life.
To restore the joints, Wangerin’s team of specialists removed most of the bone in two operations. The surgeons then severed the mandible and tilted it forward so that it increased in size and also improved the appearance of the chin area. An unexpected situation arose when taking a blood sample. When the team inserted the needle and the blood began to flow, both the mother and daughter panicked. They had seen blood samples taken by pricking the fingertip, but never using a hypodermic needle. Now the rumours that Guisela had only been brought to Germany so that criminals could remove her organs seemed to be confirmed. However, with their scant grasp of the language and a great deal of empathy, the team was able to restore the necessary trust.

The operations were a complete success. “Imagine, being able to finally touch your lips with your tongue again after 12 years,” recalled Wangerin. When Guisela stuck her tongue out for the first time, her mother burst into tears of joy. The fact that the family lives in the Andes at an altitude of almost 4,000 m means Guisela has a high red blood cell count and this hastened her recovery. Bastendorf restored Guisela’s teeth, as well as her mother’s, and in particular gave the girl the smile that nobody had been able to see before.

From farewell to a new beginning

Three months and countless smiles later, it was time to say goodbye. The thank-you party was attended by more than 40 people, all of whom had either directly or indirectly helped Guisela. Guisela thanked them shyly. A small town in southern Germany said auf Wiedersehen.

The surgery did not just change Guisela’s appearance. Back in Peru, the girl immediately attracted the attention of her classmates. For hours, she talked about her experiences in Germany, a country so far away from her homeland. The young men suddenly started to make eyes at the pretty girl, and her class chose her as their speaker. She became interested in boys. For the first time in her life, Guisela fell in love and was loved back.

Today, she lives happily with her husband and child in a house and has made her dreams come true. Meyer and Bastendorf supported the entire family with donations, enabling them to reach a standard of living equivalent to the average enjoyed by people in Pucyura. While the family of six did not make use of the options to improve their education, Lorenza very gratefully accepted many other donations in kind, for example the property with road access, a gas stove and new furniture. An acquainted dentist takes care of the family’s oral health in Cuzco on a quarterly basis.

Bastendorf and Meyer flew to Peru in November last year and through their trip saw for themselves that their help and their donations were worthwhile and had changed lives for the better. They also realised that they could not apply western European values, for example offering a better education, to Lorenza’s family. The family is happy with the modest life that they now lead. And what could be more important than having good health?

Whether in Eislingen or in Pucyura, we can make a big difference with small gestures. Every day, all employees in a practice can motivate patients to improve their oral hygiene. Every dentist and dental hygienist has the expertise and tools to ensure lifelong oral health for their patients. This must be the daily task of every dentist. Every employee can also do something for those who have not (yet) experienced this luxury. Anyone can help children like Guisela through donations, volunteer work and simply by sharing their stories. Readers who would like to start helping today are invited to visit the website of Förderverein Faziale Fehlbildungen, www.fffev.org.