

# CASE STUDY

Nº 8

**Name:** Robert J. Lamacchia  
**Age:** 26  
**Occupation:** Chef/Musician  
**Location:** Australia

## Symptoms

Robert suffers from poor posture due to standing at work. He is a tall man and the standard work bench is too low for good working posture. He was suffering severe neck and back pain. At home, he sits at a keyboard playing and composing music, and he realised that this was aggravating his symptoms. When he started to suffer continuous headaches and was having problems at work due to these symptoms, Robert suspected that his posture was the cause and that his seating was contributing to the problem. He saw the sign outside the Bambach Saddle Seat factory and decided to see if this seat could help with his symptoms.

## Introduction to the Bambach Saddle Seat

After trying the Bambach Saddle Seat in the showroom, he took one on trial. A Saddle Seat consultant visited his home to advise him on his position at the keyboard. The keyboard had to be heightened, as did the monitor.

## Result

Robert said that, as soon as he sat down on the Bambach Saddle Seat, he felt comfortable with no pain. His pain now only comes from the kitchen work. The result for Robert is that he feels more creative and is more productive. His headaches are gone and he reports that he enjoys his music more. Robert says:

*The Saddle Seat has given me a better lifestyle and posture. It has saved my back I was having regular massage, but now I only go sometimes. I realised that at my age if I did not do something soon I would have a severe problem later. The seat is well worth the investment.*



Robert in his conventional, flat musician's seat. His pelvis is rotating backwards, flattening his lumbar curve; his abdominals are inactive, and he has poor head, neck and shoulder posture. He has to lean forward from the waist. His work requires quite a lot of rotation across a fixed pelvis, which causes pain and stress.

Robert on his Bambach Saddle seat, his lumbar lordosis restored. His head and neck are now in good alignment, his shoulders relaxed, his arms and hands in optimal functional position. His weight is now over his feet, reducing the load on his back. He is able to pivot and twist in any direction with a 'straight' back and no rotation.

## The Award-winning Bambach Saddle Seat



Mary Gale

The idea for the Bambach Saddle Seat came to occupational therapist and horsewoman Mary Gale in treating patients who could not sit unsupported on an ordinary seat or wheelchair. Mary found that the same patients could balance quite independently on horseback and assume a symmetrical posture.

It occurred to Mary that if she could replicate the 'saddle position', where the spine is able to assume its natural curves, she would create an ideal seat for therapy as well as for task seating.

A review of literature showed work of Dr A.C. Mandel, who noted that the ideal sitting posture for the human spine is achieved on horseback. Other researchers also concluded that ordinary furniture removes the natural curves from the spine and places great stress on the spinal discs. Anecdotal reports from horse riders who suffered severe back pain on the ground, yet who gained marked relief when mounted in the saddle, were also noted.

Several years of experimentation resulted in the Bambach Saddle Seat, deceptively simple in design but incorporating refinements and features that permit sitting for extended periods without loss of a healthy spinal curve. The proof is that the Bambach Saddle Seat is enabling many people who suffer disabling back pain to return to work. The seat also offers the opportunity for normal adults and children to sit to work independently in correct posture and maintaining mobility, but it is especially valuable for many who are physically impaired.



**NeoCon Silver Award**  
Design Excellence for  
Desk/Workstation Task Chairs



**Winner ADEX Award**  
for Ergonomic Task Seating

### Published papers on the Bambach Saddle Seat

T. Verkindere, C. Lacombe, and J. P. Lodter, 'Electromyographic study of the dynamic sitting position suitable for dentists', *L'information Dentaire*, Vol. 80 No. 42 (March 1998)

M. Gale, S. Feather, S. Jensen, G. Coster., 'A Multi Disciplinary Approach to the Design of a Work Seat to Preserve Lumbar Lordosis', *Australian Occupational Therapy Journal*, Vol. 36 No. 2 (June 1989)

### Publication

Mary Gale, *The Seated Spine & The Bambach Saddle Seat*, Brookvale, NSW, 1997.

### Research papers on the Bambach Saddle Seat have been presented at:

International Conference on Ergonomics Occupational Safety & Health & the Environment, Beijing, October 1988.

Third International Physiotherapy Congress, Hong Kong June, 1990.

The National Safety Council of Australia's Congress, 'Futuresafe', Adelaide, South Australia, May 1992.

'Tadsem', Cumberland College of Health Sciences, University of Sydney Campus, Australia, October 1992.

World Federation of Occupational Therapists Conference – The Scientific Programme Technology Seating Sessions, Imperial College, London, April 1994.

### Research on the Bambach Saddle Seat has been exhibited via poster presentation at:

The World Federation of Occupational Therapists, Melbourne, Victoria, Australia, April 1990.

World Physiotherapy Congress, London, UK, September, 1990.

### Unpublished papers on the Bambach Saddle Seat

A. Nicholls, Doctor of Chiropractic: 'Report; Physiological Evaluation of the Intact Column-Pelvis-Meningeal System Radiographic Outcome Findings'.

Prof. G. Schumpe, Graduate Physicist/Medical Practitioner: 'Biomechanical Study of Sitting on the 'Saddle Seat'.

M. Gale, S. Aldrich, S. Jensen, W. Gale, 'Comparison Study of a Saddle Seat with Conventional Office Work Seat'.



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