case reports
THE CARE GUIDELINES

CASE REPORT

To encourage other practitioners to consider submitting a case report for the E – News, we have restructured the format in line with recommendations from July 2014 and have left in the key guides – should you be interested just e mail info@nutri-linkltd.co. We will send you the word doc.

Case reports are profesional narratives that outline the diagnosis, treatment, and outcomes of the medical problems of one or more patients. Information from case reports can be shared for medical, scientific, or educational purposes. They provide a framework for early signals of effectiveness adverse events, and cost. Case reports and the systematically collected data from which they are written also provide feedback on clinical practice guidelines.

Menopausal Cluster of Symptoms & Signs Resolve with NT

Abstract. *Summarise the following information if relevant: (1) Rationale for this case report, (2) Presenting concerns (eg, chief complaints or symptoms, diagnoses), (3) Interventions (eg, diagnostic, preventive, prognostic, therapeutic exchange), (3) Outcomes, and (4) Main lesson(s) from this case report.*

This case explores a nutritional focused approach to the resolution of a case of a patient who had been experiencing a range of signs and symptoms before and after her menopause.

Premenopause is a term used to mean the years leading up to the last period, when the levels of reproductive hormones are already becoming more variable and lower, and the effects of hormone withdrawal are present. It often starts some time before the monthly cycles become noticeably erratic in timing. Perimenopause refers to the menopause transition years, a span of time both before and after the date of the final episode of flow. Postmenopause is the term that describes women who have not experienced any menstrual flow for a minimum of 12 months.

Menopause is the cessation of a woman's reproductive ability, the opposite of menarche. Menopause is usually a natural change and typically occurs in women in midlife, during their late 40s or early 50s, signaling the end of the fertile phase of a woman's life. Menopause is commonly defined by the state of the uterus and the absence of menstrual flow or periods, but it can instead be more accurately defined as the permanent cessation of the primary functions of the ovaries.

The transition from a potentially reproductive to a non-reproductive state is normally not sudden or abrupt and occurs over a number of years. It is a natural process of biological aging. For some women, there can be accompanying signs and effects which includes lack of energy, hot flashes and night sweats, and mood changes, vaginal dryness or atrophy, incontinence, osteoporosis, and heart disease. These signs and symptoms are attributed, quite correctly, to the effects of lower levels and withdrawal of the oestrogenic hormones and progesterone.

Hormone Replacement Therapy (HRT), using synthetic hormones, has been recommended to women to smooth the symptoms that can occur during the transition between the reproductive to non-reproductive state. HRT is also believed to offer other benefits to health particularly on bone health and potentially for cardiovascular health. The emergence of bio-identical hormones has occurred over recent years for those women who wish to choose a hormone replacement therapy that provides the very same molecular structure

as those hormones that naturally occur in the body. All HRT carries increased risk of promoting certain types of cancer. HRT is controversial in that it is seen by some as a medical intervention for an entirely natural process of biological aging.

Key Words. *Provide 3 to 8 key words that will help potential readers search for and find this case report.*

Menopause, perimenopause, hot flushes, bloating, indigestion, stress, chronic sympathetic overdrive, fatigue, mood.

Introduction. *Briefly summarise the background and context of this case report.*

S.P. is a 52 year old Caucasian woman who had been experiencing a wide range of signs and symptoms for two and a half years before and after her menopause. Some of her symptoms fall under the category of 'menopausal', and some are not specific to the natural hormonal change that occurs in aging.

S.P. had always worked extremely hard throughout her adult life. After her two children, who are now in their early twenties, she quickly returned to work. She had rarely needed a day off in her life and was quite unused to being or feeling unwell.

However, her female cycle had become more erratic from the age of about 49 years of age, and she reported, as she migrated through the premenopause and perimenopause a whole variety of health challenges manifested in her life. The specifics are described below.

S.P. had sought medical help and then complementary health solutions for her signs and symptoms and this included massage, acupuncture, homeopathy, and her first visit to a Nutritional Therapist was with me. She had yet to experience anything other than marginal improvements and was very frustrated by the whole process and told me that she was now almost a totally different woman to that of her entire adult life – not in a good way, she emphasised.

Presenting Concerns. *Describe the patient characteristics (eg, relevant demographics—age, gender, ethnicity, occupation) and their presenting concern(s) with relevant details of related past interventions.*

S.P. is a white, 52 year old, married lady who lives in the Home Counties in England. S.P. is 5' 10" tall, and weighs 13 stone 2 lbs.

She is a director of a family owned business and her role is specifically with the HR department of an increasing workforce in a manufacturing business that had seen an increase in business over the past few years, just at the time when her capabilities were being diminished by her health issues.

S.P. presented with hot flushes, excessive perspiration that was visible on her face ("a hot, sweaty face"), interrupted sleep, poor mood, abdominal bloating and indigestion and constipation and wind, dry skin, poor hair condition, dry vagina, no libido, weight gain, increased perception of stress, lack of motivation to exercise and frank inability to do the things she used to be able to do. She also had frequent headaches and needed to urinate far too often during the day.

When the symptoms first started she visited her GP and he had prescribed HRT, but this was only taken for a few months before it was stopped when it was discovered that she had a small embolism in her calf after a 10 hour flight.

The HRT had made some difference to the hot flushes and temperature control but not much else. After this, S.P. sought the help of a massage therapist friend, and with thrice weekly appointments helped S.P. to cope with how she had been feeling. However, this was palliation alone and simply was not addressing the underlying issues within S.P.'s body.

S.P. then sought out help from an acupuncturist and a twice weekly appointments did help to make everything feel better but the benefit was marginal and a relatively poor return for the time it took out of S.P.'s week.

S.P. visited a homeopath and was impressed by the early improvements in her hot flushes and her mood. She felt less 'toxic' when taking the homeopathic remedies in the first month. However, in spite of continuing with the pillules she noticed an annoying return of her symptoms to the same level she'd had before over the next two months.

S.P. had support from her husband and friends and colleagues whom she knew very well, but she was turning into a different person to the capable, energetic, relatively slim, positive woman that she had been until this point in time. She felt like she had lost her identity along with her energy, get up and go and sex drive.

S.P. could do nothing else than persevere with the way her body was, and so for over a year she fought, quite literally, she told me, the process that was occurring inside of her. This emotional fight was to no avail, however. She could see why women turned to HRT to ameliorate the symptoms of menopause, and was tempted to go back to it, in spite of the known blood clot risk.

A coincidental meeting with a friend led her to make an appointment with myself, since she had not been aware that the food she ate or nutritional supplements could make a difference. She did work very hard and long hours, and was not prone to spending time on the computer looking up what might help and nor did she visit health spas or health food stores to ask others what she may do to help herself. She told me she "would do anything, and I mean anything", to get herself into a better state of health and return to the way she had been.

Clinical Findings. *Describe: (1) the medical, family, and psychosocial history including lifestyle and genetic information; (2) pertinent co-morbidities and relevant interventions (e.g., self-care, other therapies); and (3) the physical examination (PE) focused on the pertinent findings including results from testing.*

S.P. had a brother and no sister so there was no immediate family against whom to compare. She had not spoken to her mother or aunt about their experience of the menopause so there was no information here. Menarche had occurred at 12 years of age, and she had had a regular cycle and no issue with conceiving her two children. S.P.'s cycle returned after breast-feeding and there had been no early warning signs of what was to come when she was in her mid to late 40s.

S.P.'s lifestyle was one in which she was devoted to her work, to the business that had been established by her parents and an uncle. She was committed to the workforce within the company but also took responsibility for many aspects of the business including travelling abroad to sales meetings. She was more able to devote more of her time to her work now that her children had left home a few years before.

S.P.'s parents are fit and well, enjoying their retirement, and there is no common health theme or premature morbidities in her family tree.

S.P. stood up at one point in the first consultation and showed me what she was complaining of, that she had a rubber ring of fat around her abdomen, and her bra straps were now surrounded by fat on her back with the increased stores she had. She turned sideways and showed me her bloated abdomen which was present most of the time. She felt unfit and could not engage in the classes that she had been doing for years. She did do some yoga classes but felt embarrassed in front of others and disliked her body and ended up feeling pretty miserable as a result of attending these classes. There did not appear to be any physical improvement as a result of doing the yoga for an hour or more.

S.P. was not at all inhibited, however, in describing in detail every aspect of her body and health that was failing. Mood, energy, skin, weight, bowels (incl wind!) – all had something 'wrong' with them. She was very disappointed that her libido was flat and gone, but she appreciated that this may be because she didn't like the sight of her own body. She also experienced a very dry vagina and sex had become painful now, so lubrication was needed. She marvelled at how understanding her husband was.

S.P.'s skin was dry and she used moisturiser with careful attention to detail for the first time in her life. It was not possible to see her skin without the moisturiser, but I did ask to see her heels which were noticeably cracked.

Lastly, she was experiencing dull, low-grade headaches most days and wondered if this was due to the sheer stress she felt in herself. At first, over a year ago, she had taken paracetamol tablets for the headaches but they were not effective and she felt more tired when taking them so she stopped them.

After thirty years of creating a lifestyle for herself and her family, along with her husband, she now felt that she could not enjoy the fruits of those rewards and appreciated that her health was everything. She told me she had considered anti-depressants, liposuction and crash liquid diets but hadn't managed to do any of these … yet.

Timeline. *Create a timeline that includes specific dates and times (table, figure, or graphic).*

S.P. was born in 1962 in London.

S.P. took the contraceptive pill in her twenties on and off for about 5 years. After children she used a hormonal implant.

During her life, S.P. had enjoyed very good health. She had suffered some exercise related injuries, had caught a cold from time to time but had not had any health concern that had existed for any period of time and nor which had recurred. She had never smoked. She drank alcohol occasionally but had poor tolerance which meant that she did not drink much. When she travelled she told her colleagues and business acquaintances that she did not drink any alcohol.

Aged 28 in 1990 she gave birth to her first daughter, and 2 years later in 1992 she gave birth to her second daughter. Both girls were and are fit and well.

Aged 48, in 2010, she had what she now recognises were the first signs and symptoms of the menopause. She had an increased sense of being hot with some night-time sweats as well as the beginning of some drops in energy in the afternoon. At the time, she did not pay much attention to them.

Aged 49, in 2011, S.P. can recall that the symptoms were more frequent and troubling. She had yet to gain weight, however. She also started to get bloated. At this time, there was increased stress at work due to less demand for their products in China and India where she travelled about twice a year so she put the digestive symptoms down to stress. She is not sure what caused what but knows there is an association with the onset of gut symptoms and sluggish bowels and the increased pressure at work and the change in her hormones.

Aged 50 in 2012, and as if the half century itself had ushered them in, S.P.'s symptoms and signs started to appear all together, all at once. Whilst her periods were more and more spaced out in time, and this was a gradual process, the symptoms emerged suddenly "as if someone had turned the tap off inside her body". "Dry skin, lack of energy, weight gain and the rest of it!"

2012 & 2013 saw attempts to make things better, but she could not take HRT for longer than a few months due to the blood clot she had had, and acupuncture and homeopathy and massage had some effect but nothing that was worth continuing, which was why S.P. was still open to seeking out other help.

November 2013, S.P. was 51 years old, – we met for the first appointment which appeared to be somewhat more challenging to diarise than other patients due to her work commitments and schedule. Whilst it is a truism that learning about patients' case histories in advance is always a useful thing, I was very pleased that her assistant and husband had contributed to this information the week before we met because this meant that I was prepared for what S.P. was to tell me.

The expression I had used that had motivated S.P. to engage in the process of completing this health information, I later learned, and without which otherwise would have resulted in incomplete information at the first appointment, was that "it would make it possible to have the most effective meeting" if the information was prepared and sent back to me in advance.

The recommendations and progress made are described below.

Diagnostic Focus and Assessment. *Provide an assessment of the (1) diagnostic methods (eg, PE, laboratory testing, imaging, questionnaires, referral); (2) diagnostic challenges (eg, financial, patient availability, cultural); (3) diagnostic reasoning including other diagnoses considered, and (4) prognostic characteristics (eg, staging) where applicable*.

At the first meeting, I established the main goals that S.P. wanted. These were:

1. To feel like my old self again.
2. To feel well again.
3. To be free of hot flushes and perspiration.
4. To be free of bloating, indigestion, constipation and wind.
5. To pee normally again.
6. To lose a stone and a half of body fat.
7. To be free of dry skin.
8. To have improved sex drive and function.

The means by which I gathered the information about S.P. was through the use of completed questionnaires, a bullet point health history of her life, and a 7 day diet diary. It was interesting to note the different hand-writing and typing fonts used in these documents, which clearly reflected the helping hand of her husband and assistant. They were very keen to see S.P. feel better.

The sections within the questionnaires that listed symptoms associated with adrenal and thyroid imbalances scored highly, as did the sections relating to her digestive function. The section for female hormone signs and symptoms were high but interestingly not as high as those for the thyroid and adrenal sections.

There were no lab tests or scans to provide information at the outset, although two tests were recommended by myself at the end of the first appointment.

S.P. told me that she would do anything it took to help her get well. I recognised that this would still need to be practical within the scope of her daily busy life. Tests, however, were not a problem, and she could afford to do any that were to be recommended.

On the basis of S.P.'s lifestyle and committed work schedule and non-stop sense of responsibility combined with strong indicators of high impact adrenal stressors, I recommended an Adrenal Stress Profile saliva test. On the basis of the same stress factors along with signs & symptoms of thyroid hormone imbalances (weight gain not explained by increased food intake, fatigue, sluggish bowels, cracked heels, dry skin, dry hair) I recommended a comprehensive thyroid hormone & antibody test.

In my clinical experience as well as being taught this, I am aware of the importance of the health of the adrenal glands and secondarily the thyroid hormone balance in women experiencing menopausal symptoms. This may be particularly important to rule out when there is a sudden manifestation of the symptoms, as S.P. described it "like someone had turned off the tap".

Therapeutic Focus and Assessment. *Describe: (1) the type(s) of intervention (eg, preventive, pharmacologic, surgical, lifestyle, self-care) and (2) the administration and intensity of the intervention (eg, dosage, strength, duration, frequency).*

November 2013
The first appointment highlighted multiple signs and symptoms which were distressing to S.P., who up until this point had been a high performing individual, tall with a slim and strong physique. Two lab tests were recommended to identify her existing level of cortisol, DHEA, thyroxine (T4) and triiodothyronine (T3).

December 2013
The test results came back and we arranged a telephone appointment to discuss the test. However, S.P. was not able to take in all of the information so a brief report letter was prepared to describe the test results along with the recommendations.

The cortisol levels were low normal for the morning value, and then low for all the remaining three values in the day. The total daily output was 13.6 with the low end of the normal reference range being 21. The DHEA levels were low normal for the two readings. With the evident stress in her life, the expectations would be that her cortisol levels would be elevated. The reality of the low levels reflects that her adrenals were unable to produce the level of cortisol to support her body so it could best handle the stresses faced in daily life and the extra burden of the change in life (i.e. the menopause).

The thyroid hormone levels were all within the normal range, but the FT4 was low in the range, and the FT3 was low in the range. The TSH level was 2.50 which is within the normal range of 0.4 to 4.5. There were no positive thyroid antibodies.

The initial recommendations for S.P. focused on ensuring that her food intake was as optimal as possible. S.P. had somewhat given up on dieting or losing weight and this had led her to allow less than ideal food to be consumed almost every day. Crisps, biscuits, dairy milk chocolate and dried fruit were the four foods she would graze on during the day. Her meals themselves, however, were very sound.

I specifically asked S.P. to eat three times a day only, with no snacks, to consume a moderate to low carb diet. Only whole and unprocessed food was permitted and a protein with each meal was recommended, which supports adrenal function. A high intake of colourful plant food (rich in phytonutrients) was also recommended.

We needed to spend some time discussing on how to implement this, and over the Christmas holidays.

Of utmost importance was the introduction of some sort of conscious relaxation before eating, and a sure-fire way of having S.P. chew her food and put down her cutlery in between mouthfuls.

We also established three five minute slots in the day when she would listen to classical music of her choice and close her eyes whilst she did so. This was only possible with the help of her assistant who would control this aspect of S.P.'s diary. Having encountered many patients for whom this type of obligate relaxation time would be suitable, it is also extremely hard to implement for some. That S.P. had an assistant definitely made this do-able.

I also recommended these supplements to S.P. to take on a daily basis. Again, S.P.'s assistant would help with the ministering of these supplements.

Programme One Supplement Name & Brand	Dose
Adrenal Rebuilder (Dr W)	1 tab with breakfast & lunch
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach mid afternoon & at bedtime if needed.
Bio-3B-G (BRC)	4 tabs first thing, then 3 with each meal
Meda-Stim (BRC)	2 with breakfast & lunch

Follow-up and Outcomes. *Please describe the clinical course of this case including all follow-up visits as well as (1) intervention modification, interruption, or discontinuation, and the reasons; (2) adherence to the intervention and how this was assessed; and (3) adverse effects or unanticipated events. Please describe (1) patient-reported outcomes, (2) clinician-assessed and -reported outcomes, and (3) important positive and negative test results.*

January 2014

We met for the first follow up in the third week of January, that being the only time S.P. could make it. S.P. had managed to implement the food recommendations both at home and at work, but she had only been 100% with the supplements at work, and about 50% at home. There were quite a number to take.

S.P. reported that some of her goals were being reached, and for this she was very pleased. In fact, there was more progress with the implementation of the nutritional intervention with one single appointment than any of the other appointments with other therapists put together, she told me.

The symptoms classically associated with the menopause such as the hot flushes, interrupted sleep, frequent need to urinate, fatigue and moodiness had all definitely improved, but there was still some way to go before they were resolved. Her skin was a little less dry but this was difficult to determine with any accuracy since she still used moisturiser and was not going to have a day away from this to find out the true state of affairs.

She felt less stressed too, and this includes the manic time that Christmas always represents. She slept pretty well too. She had not lost any weight and she seemed remarkably OK about this so S.P. told me that for the past two Christmas holidays she had gained about 3-4 lbs during each of them.

However, her digestive related symptoms such as the bloating, constipation & wind had not changed. Then she remembered that the indigestion she had had was gone, completely. This occurred within the first two weeks.

Given her application with the relaxation and chewing of food, I admit that I was disappointed with the lack of improvement in her other digestive symptoms. At the same time, it had only been over a month or so that S.P. had been implementing these recommendations, and with her years of Chronic Sympathetic Overdrive (CSO) it may well take longer to reduce the 'stress' within her body which would permit her digestive system to work better. Also, it would also take some time for the adrenal and thyroid hormones to become normalised and their role in energy production throughout the body.

With the help of her husband and assistant, she had been supported in abiding by the recommendations made to her. This had then helped to create habitual patterns that S.P. had realised were very good for her.

I considered having S.P. eliminate wheat and we discussed the matter. We agreed to this for a trial period and we found substitutes for her. I explained the value of the trial elimination diet vs a blood test, which she admitted to me would take some weeks to organise in her work schedule.

The supplement programme was amended to include a digestive enzyme and the dose of the active B vitamins (Bio-3B-G) was reduced.

Programme Two Supplement Name & Brand	Dose
Adrenal Rebuilder (Dr W)	1 tab with breakfast & lunch
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach mid afternoon & at bedtime if needed.
Bio-3B-G (BRC)	3 with each meal
Meda-Stim (BRC)	2 with breakfast & lunch
Gluten-Gest (ARG)	1 with breakfast, 2 with lunch & 2 with dinner.

March 2014

We met for our third appointment in early March 2014. S.P. told me that she had the ongoing support at work and at home too. There had been a real improvement in her hot flushes and hot face and energy and her urinary frequency. Furthermore, her weight loss had been observable by others, outside of her immediate close circle, and she was very pleased about this. She had lost 8 lbs from her original weight in November.

The wheat avoidance had gone pretty well, she told me, although on at least two occasions she had knowingly consumed some, and perhaps on a few other occasions unknowingly. She reported that she thinks she felt

heavier and more bloated on these occasions which prompted her to be stricter with its avoidance. Generally, unlike last time, her degree of bloating had improved. Her bowels were moving a little bit better and she was drinking more water too which may have helped. The wind was definitely less, she told me smiling, and then she told me that only her husband could make this call and had done so.

S.P. had hoped that the improvements in her hormonal symptoms would continue to improve and they did not appear to be much better than before. I explained how there had been many years of duress before the symptoms had appeared and that it may take quite some months before she could be considered 'better'. In addition, her work was just as busy as ever, and she still travelled abroad.

When in the UK office she did still take the five minute slots to listen to music and her assistant closed the blinds and fielded the calls. This has been a very effective exercise in putting things in perspective, because she had believed that she never had the time to take any breaks at all. Clearly she could make this time, and nothing suffered as a result.

S.P. had also been able to re-join some of the exercise classes that she had abandoned in the past year or two. This was a big relief and she had been welcomed back to the class and she was less self-conscious than she remembered being.

I made some minor changes to the supplement programme which was all in an attempt to determine whether a lower level of supplements could help maintain the improvements and continue to help S.P. to achieve all of her goals.

Programme Three Supplement Name & Brand	Dose
Adrenal Rebuilder (Dr W)	1 tab with breakfast & lunch
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach mid afternoon & at bedtime if needed.
Bio-3B-G (BRC)	2 with each meal
Meda-Stim (BRC)	1 with breakfast & lunch
Gluten-Gest (ARG)	2 with lunch & 2 with dinner

May 2014

We met for the fourth time in early May 2014. S.P. was looking slimmer and she told me that she felt better, although it was gradual. In spite of the explanation as to what had been going on within her body and how the adrenals had taken the toll for the significant stress in her life, S.P. had still expected a more immediate recovery. The test results and repeated explanation of what had caused her symptoms were needed and did help.

S.P.'s overall energy was much better. She had lost 12 lbs in weight, and felt confident that she could lose the remaining 10 lbs, more or less, to take herself back to her previous long-maintained bodyweight. Her temperature control was also much, much better and it took a very warm lift or hot room before she would perspire. The low grade headaches had disappeared months ago. Her digestive symptoms were improving and the wheat avoidance was most definitely the correct one, since if she ever ate wheat she would be very bloated and have sluggish bowels, which were typically no longer a problem. I wondered if this was in part due to

improved thyroid hormone function which may have occurred due to the direct supplement support, the reduced perception of stress and improved blood glucose balance.

We discussed repeat testing for the cortisol levels and the benefits of so doing with and without supplements. As her life was so busy, it was agreed that we would reconsider a retest after a period of time away from the supplements at the next appointment.

In an attempt to rationalise the supplements, I swapped the Adrenal Rebuilder (Dr W) and the Bio-3B-G (BRC) to a single supplement called Stamina Caps (BRC), a product that I find very useful for very many patients. It provides a useful level of vitamin B1 and B5 with a small amount of l-carnitine and other co-factors for energy production.

Programme Four Supplement Name & Brand	Dose
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach mid afternoon & at bedtime if needed.
Meda-Stim (BRC)	1 with breakfast & lunch
Gluten-Gest (ARG)	2 with lunch & 2 with dinner
Stamina Caps (BRC)	2 with each meal

July 2014
We met for the fifth time in July 2014. S.P. was used to the process by now, and had prepared a list of pros and cons to discuss. She also had written out her typical food consumption.

By all accounts her goals were all being reached or were reached, and for this she was very grateful and she told me that she had been recommending Nutritional Therapy and specifically me to friends who were going through the same menopausal process as she had.

Her energy and mood were very good and she had lost more weight. She estimated that she needed to lose 3 more lbs and she would be back at her previous weight, although she now realised that she could be a few lbs lighter than that and was confident that she could get there. Her sleep was good and not interrupted by a need to urinate. Her bloating was considerably less but could be triggered quite easily if she over-ate, ate any wheat or ate in a hurry or was not relaxed and distracted by other matters. Her skin was feeling better. As far as her sex drive and function were concerned she still felt quite flat, with no natural libido as she had had in the past, and this was in fact, the priority of this appointment.

In addition to any practical matters that she and her husband could engage in, I again explained to S.P. about the way the body was designed to divert resources to stress and away from reproductive functions, and how her overall hormonal output was relevant (i.e. adrenal and thyroid hormones as well as the newly lower levels of female hormones post-menopause). I also explained to S.P. that the efforts she put into work were the same as before her menopause and it had taken concentrated supplemental support combined with very sound food intake to achieve the benefits thus far.

For the purpose of supporting her libido in particular the supplement programme was changed with more emphasis on female hormones. The Meda-Stim (BRC) was stopped and replaced with a glandular comprising adrenal and ovarian extracts, called Cytozyme-F (BRC).

There was emphasis again on the sheer output of energy that she had available and how much was devoted to her work. S.P. did understand this and I could see the resistance to change, but at the same time she wanted to improve her libido.

Programme Five Supplement Name & Brand	Dose
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach mid afternoon & at bedtime if needed.
Gluten-Gest (ARG)	2 with lunch & 2 with dinner
Stamina Caps (BRC)	2 with breakfast & lunch
Cytozyme-F (BRC)	1 with each meal

September 2014
We met for the sixth time in September 2014. S.P. showed me her diet diary and told me that her supplements had all been taken at work, with less than 100% at home. Her overall health was very good and her weight was now something she was very pleased with. Her female hormone symptoms were virtually gone, and I did wonder if there may be the factor of time involved here, along with the improvement in adrenal and thyroid hormone levels.

With regard to a retest, S.P. wanted to persist with the supplements and not take a break from them in order to undertake a repeat test of the ASI.

In terms of her libido, S.P. reported that she had less vaginal dryness and found it easier to nurture her libido than before, but it was different post-menopausally. However, she recognised more now that she needed to ease off her energy output in her work and create more balance in her life. We discussed the ongoing use of supplements and I described a process by which she could gradually reduce them whilst observing how she felt in all areas. The intention was to reach this level of supplementation whilst still feeling the same level of good health.

Programme Six & beyond Supplement Name & Brand	Dose
Stabilium (ARG)	4 softgels with breakfast
Zen (ARG)	1 caps on an empty stomach when needed
Gluten-Gest (ARG)	2 with any larger meal
Stamina Caps (BRC)	1 with breakfast & lunch
Cytozyme-F (BRC)	1 with breakfast & lunch

Supplement Information

Adrenal Rebuilder (Dr W)
A combination of glandular extracts from the adrenals (cortex only) and pituitary and hypothalamus and gonads. Dr Wilson describes this as his most effective supplement for adrenal function.

Stabilium (ARG) - an ancient North-Western Europe remedy derived from a ling fish called Garum Armoricum. It has been clinically trialed in USA Medical students and been found to reduce anxiety, improve sleep and improve resilience.

200 mf of Zen (ARG) - this natural, non-addictive, non-sedative supplement provides L-theanine and GABA, and helps to support a healthy response to anxiety.

Meda-Stim (BRC) - A vegetarian formula of nutrients designed to convert T4 into T3. Useful in many weight loss programmes and does not alter TSH levels.

Bio-3B-G (BRC)
A low dose yet active B vitamins for B1, B2 & B6) which can help support energy levels, and can serve as a very effective adjunct to any adrenal or thyroid hormone support programme.

Gluten-Gest (ARG) (vegicaps) - A formula of veg enzymes designed to support the breakdown of both proteins of gluten and non-gluten grains as well as a range of amylases too. Somewhat ironically, this enzyme formula is particularly useful for those who are gluten free but have a need for improved digestion.

Stamina Caps (BRC) - This formula provides thiamine, pantothenic acid, L-Carnitine, octacosanol, coenzyme Q10 & OOrganik-15™, which may serve to aid in energy production and to increase stamina. In my clinical experience this formula has made a positive contribution to energy both when sedentary and when exercising.

Cytozyme-F (BRC)
This is a combination glandular providing adrenal and ovarian extracts to support female hormone balance.

Discussion. *Please describe (1) the strengths and limitations of this case report including case management, (2) the literature relevant to this case report (the scientific and clinical context), (3) the rationale for your conclusions (eg, potential causal links and generalizability), and (4) the main findings of this case report: What are the take-away messages?*

Strengths and limitations of this case report including case management
The strengths of this case report lie in the detailed case and health history combined with the length of time for the first appointment, being an hour. To be specific there were over 600 items of data or answers to questions that were obtained in addition to the conversation with S.P.

There may have been some value in conducting tests for S.P.'s female hormones, and in repeating the ASI test.

Given her very busy lifestyle I believe that we did well to ensure relatively regular meetings, which is a reflection of her own and her assistant's desire to support S.P.'s health.

The fact that S.P.'s positive outcome in health was achieved in a number of months of targeted Nutritional Therapy confirms that there are other options to helping women with menopausal signs and symptoms than HRT.

S.P. had a long-term chronic stress history but was still able to make an impact on her health in spite of no real change in her lifestyle.

The literature relevant to this case report
There is a relative paucity of literature to support the specific intervention that I recommended to S.P. Adrenal and thyroid hormone balance has been identified as relevant to menopause but the typical focus on menopausal symptoms is on oestrogens and progesterone.

The rationale for your conclusions
The long term taxation on S.P.'s nervous and hormonal systems was reflected by the case history findings and then the two hormonal tests. The therapeutic target of intervention was S.P.'s adrenal health and overall stress management and this, combined with some minor thyroid support too, resulted in a significant improvement in her female hormone related symptoms of the menopause.

The management of her stress and engaging S.P. in relaxation before she ate, possibly combined with the use of digestive enzymes, also resulted in her digestive symptoms improving. The rationale for this is the fact that her sympathetic system was so used to being perpetually 'on' and this did not allow for her parasympathetic system to be able to support optimal digestion, and when there was a drop in female hormones, the digestive system symptoms emerged.

The main findings of this case report:

What are the take-away messages?
The main findings in this case report are that menopausal symptoms and signs can be improved with nutritional therapy (employed in the functional medicine model), and in particular by focusing on the adrenal hormones, and secondarily the thyroid hormones. It is not essential to focus on female hormones or their metabolism or function.

The case history detail should reveal the evidence of when the adrenals and thyroid hormones are involved, but there may well be value in testing these in each case to help determine the therapeutic intervention required.

The long term lifestyle of a woman is of utmost relevance when it comes to their experience of menopausal symptoms.

Rather than HRT or bio-identical hormone replacement, there may be safer nutritional approaches to ameliorating the signs and symptoms of the natural biological aging process in women as menopause occurs.

Patient Perspective. The patient should share his or her experience or perspective of the care in a narrative that accompanies the case report whenever appropriate.

S.P.'s views have been expressed within this case report. However, here is a summary of his views of her experience.

"The nutrition programme resulted in improvements in me that were greater than the sum of the other therapies for my menopausal symptoms, from one single appointment. I had no idea that the food I ate and the supplements I could take could have such an effect on me and make such a difference. I also had no idea that other hormones such as cortisol played such a big role in menopausal symptoms. Who tells us this?

The change in my overall health has been nothing less than fantastic and everyone I know now knows what I have done and what has happened. I have also learned that I need to focus on more balance in my life and not work so hard now that I am post-menopausal.

I am also going to avoid wheat for sure in the future!

At first, I did not want to take the supplements but now I have seen what they do I consider them to be vital for me, and I hope I do not become addicted to them."

Informed Consent. *Did the patient give the author of this case report informed consent? Provide if requested.*

The patient is not aware her case history is being used, and all identifiable data has been removed. S.P. are not her real initials.

Case Report Submission Requirements for Authors

1. Competing interests. *Are there any competing interests?*

None Known

2. Ethics Approval. *Did an ethics committee or Institutional Review Board give approval? If yes, please provide if requested.*

This case was not presented to an ethics committee.

3. De-Identification. *Has all patient related data been de-identified?*

All patient data has been re-identified

4. Author. *Name of Author and practice*

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