# Liver Cancer

"This was one of the worst cases I have seen. I thought to myself, 'This patient will be dead by Christmas, and lucky to see Thanksgiving.' Instead he went skiing in Colorado over Christmas. Truly an amazing recovery, I could hardly believe it." - Dr. Merkle

# In just 3 months-

- ✓ Cancer Marker Plunged From 4,163 to 128
- ✓ Sleeping Through The Night
- ✓ Off 2 Prescriptions Including Vicadin and Doxycidine.
- ✓ Multiple Liver Pulmonary Nodules Disappeared
- ✓ No Growth In Other Nodules
- ✓ Reached A Healthy Weight

# **Initial Symptoms-**

- ✓ Liver and Lung Cancer
- ✓ 7 Lung Nodules
- ✓ Extensive Metastasis In Right
  ✓ Quickly Losing Weight Lobe Of Liver
- ✓ Diabetes
  - √ Gallstones

"I don't have a cure for cancer and I did not treat this patient's cancer. His body already knew how to fight the disease; all I had to do was determine what was deficient, imbalanced, dysfunctional or toxic and correct it with diet and supplements. As the body gets healthier, it's amazing what can happen."

-Dr. Van D. Merkle

#### **Patient Profile:**

**08-09-05** - The 70-year old patient presented shortly after being diagnosed with advanced malignant adenocarcinoma of the liver. At the time of his initial visit with me, the patient was down to 148 lbs at 5'8" and his blood pressure was 129/64. A CT scan two months before his consultation at the Back To Health Center showed extensive liver lesions and necrosis with almost the entire right lobe involved with metastatic disease and at least 7 nodules on the lungs measuring 1 cm or less. An abdominal ultrasound in July also located several gallstones. The patient did not respond to the first round of chemotherapy and treatments were immediately stopped. He brought in some preliminary blood work taken in July which showed the cancer markers CA-19 at 3,651 and CEA at 56 and a glucose reading of 254. The Alkaline Phosphatase, LDH, AST and ALT which are markers of liver disease, cancer or inflammation were all very

high. In this case the AST result nearly doubled the ALT indicating a critical case where the patient may be in danger of liver failure.

## **Preliminary Blood Test From 07-29-05:**

| Test Description Date       | Current<br>Result<br>07/29/2005 | Current<br>Rating | Prior<br>Result | Delta | Н      | ealti | hy     | CI     | inic | al     |
|-----------------------------|---------------------------------|-------------------|-----------------|-------|--------|-------|--------|--------|------|--------|
| Glucose                     | 254.00                          | HI                |                 |       | 80.00  | -     | 95.00  | 65.00  | -    | 99.00  |
| Alkaline Phosphatase 25-150 | 610.00                          | HI                |                 |       | 65.00  | -     | 108.00 | 25.00  | -    | 160.00 |
| LDH                         | 679.00                          | HI                |                 |       | 120.00 | -     | 160.00 | 100.00 | -    | 250.00 |
| SGOT (AST) (AST)            | 119.00                          | HI                |                 |       | 15.00  | -     | 26.00  | 6.00   | -    | 40.00  |
| SGPT (ALT) (ALT)            | 62.00                           | HI                |                 |       | 15.00  | -     | 26.00  | 6.00   | -    | 55.00  |
| CA 19-9                     | 3,651.00                        | HI                |                 |       | 0.00   | -     | 0.00   | 0.00   | -    | 37.00  |
| CEA                         | 56.00                           | HI                |                 |       | 0.00   | -     | 2.00   | 0.00   | -    | 3.00   |

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The patient was obviously under considerable emotional stress and had difficulty staying asleep, frequently waking with night sweats. He also suffered muscle weakness, trouble swallowing and a poor appetite. When we first saw him, he was taking Coumadin, an anticoagulant for his artificial heart valve, Doxycicline for an infection in his breathing apparatus and Vicadin for pain.

Due to the severity of this patient's condition, I immediately ordered a supplement regimen and dietary recommendations during the initial consultation based on his preliminary blood work to reduce stress on the liver, boost his immune system and optimize his health.

### **Patient's tests results:**

**08-10-05** - The next day the patient retested one tumor marker and completed a tissue mineral analysis to give us an idea of the cancer's rate of progression. This test was a revelation of the severity of the case: In just 11 days, the CA-19 had jumped 512 points!

## **Results of Initial Blood Test:**

|                             |       | Current<br>Result | Current | Prior<br>Result |       |         |   |        |        |         |        |  |
|-----------------------------|-------|-------------------|---------|-----------------|-------|---------|---|--------|--------|---------|--------|--|
|                             |       |                   | Rating  |                 |       |         |   |        |        |         |        |  |
| Test Description            | Date: | 08/10/2005        |         | 07/29/2005      | Delta | Healthy |   |        | CI     | linical |        |  |
| Alkaline Phosphatase 25-150 |       | 913.00            | HI      | 610.00          | 8     | 65.00   | - | 108.00 | 25.00  | -       | 160.00 |  |
| LDH                         |       | 918.00            | HI      | 679.00          | 8     | 120.00  | - | 160.00 | 100.00 | -       | 250.00 |  |
| SGOT (AST) (AST)            |       | 163.00            | HI      | 119.00          | 8     | 15.00   | - | 26.00  | 6.00   | -       | 40.00  |  |
| SGPT (ALT) (ALT)            |       | 59.00             | HI      | 62.00           | 0     | 15.00   | - | 26.00  | 6.00   | -       | 55.00  |  |
| CA 19-9                     |       | 4,163.00          | HI      | 3,651.00        | 8     | 0.00    | - | 0.00   | 0.00   | -       | 37.00  |  |
| CEA                         |       |                   |         | 56.00           |       | 0.00    | - | 2.00   | 0.00   | -       | 3.00   |  |

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Several toxic elements, deficiencies and imbalances appeared in the hair test, most notably high levels of aluminum, lead and mercury. These toxic elements can create a significant load on the immune system and also deplete several essential elements like calcium and magnesium which aid the body with healing and repair.

#### **Results of Initial Hair Test**

|                            | Current<br>Result | Current<br>Rating | Prior<br>Result |       |         |        |         |        |
|----------------------------|-------------------|-------------------|-----------------|-------|---------|--------|---------|--------|
| Test Description Date:     | 08/09/2005        |                   |                 | Delta | Health  | у      | Clinica | al     |
| Toxic Elements             |                   |                   |                 |       |         |        |         |        |
| Aluminum                   | 15.00             | HI                |                 |       | 0-      | 2.20   | 2.21-   | 7.00   |
| Cadmium                    | 0.24              | HI                |                 |       | 0-      | 0.05   | 0.06-   | 0.15   |
| Lead                       | 4.40              | HI                |                 |       | 0-      | 0.99   | 1.00-   | 2.00   |
| Mercury                    | 1.20              | HI                |                 |       | 0-      | 0.50   | 0.51-   | 1.10   |
| Nickel                     | 0.24              | hi                |                 |       | 0-      | 0.20   | 0.21-   | 0.40   |
| Silver                     | 0.30              | HI                |                 |       | 0-      | 0.06   | 0.07-   | 0.12   |
| Tin                        | 0.12              | Opt               |                 |       | 0-      | 0.15   | 0.16-   | 0.30   |
| Titanium                   | 0.52              | hi                |                 |       | 0-      | 0.50   | 0.51_   | 1.00   |
| Total Toxic Representation | 4.00              | HI                |                 |       | 0-      | 2.00   | 2.01-   | 3.00   |
| Essential Elements         |                   |                   |                 |       |         |        |         |        |
| Calcium                    | 155.00            | LO                |                 |       | 400.00- | 417.00 | 200.00- | 750.00 |
| Magnesium                  | 9.00              | LO                |                 |       | 43.00-  | 48.00  | 25.00-  | 75.00  |
| Sodium                     | 7.00              | LO                |                 |       | 37.00-  | 45.00  | 12.00-  | 90.00  |
| Potassium                  | 9.00              | LO                |                 |       | 21.00-  | 22.00  | 9.00-   | 40.00  |
| Copper                     | 14.00             | Opt               |                 |       | 12.00-  | 15.00  | 10.00-  | 28.00  |
| Zinc                       | 530.00            | HI                |                 |       | 150.00- | 165.00 | 130.00- | 200.00 |

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The patient's daily supplement list was updated based on the above test results and the patient followed the new regimen exactly as it was written. About two weeks after his initial consultation, he felt well enough that he decided to retry chemotherapy treatment. Doctor's placed him on a low dose chemo and he continued to take all the recommended supplements.

**09-19-05** - We ran a more thorough blood analysis that not only re-checked his cancer markers but also revealed how his system was dealing with the chemotherapy. In just one month we saw astounding results with the CA 19-9 plunging 3,802 points! Other areas also showed amazing improvement such as the Alkaline Phosphatase, LDH and SGOT which all dropped out of the clinically very high ranges. The Glucose which read 254 on the preliminary blood work in July dropped to 117, nearing the healthy range.

#### **Results of Second Blood Test:**

|                                       | Current<br>Result | Current<br>Rating | Prior<br>Result |       |        |       |        |        |     |        |
|---------------------------------------|-------------------|-------------------|-----------------|-------|--------|-------|--------|--------|-----|--------|
| Test Description Date:                | 09/19/2005        | Rating            | 08/10/2005      | Delta | н      | ealti | hv     | Cli    | nic | al     |
| Glucose                               | 117.00            | HI                |                 | Dona  | 80.00  | Juic  | 95.00  |        | -   | 99.00  |
|                                       | 6.30              | HI                |                 |       | 4.61   | -     | 5.40   | 4.50   |     | 5.70   |
| Hemoglobin A1C (Gly-Hgh)<br>Magnesium | 1.90              | lo                |                 | \     | 2.21   | -     | 2.51   | 1.60   |     | 2.60   |
| Calcium                               | 9.60              | lo                |                 |       | 9.71   |       | 10.10  | 8.50   |     | 10.60  |
| Phosphorus                            | 4.10              | hi                |                 |       | 3.41   |       | 4.00   | 2.50   |     | 4.50   |
| Calcium/Albumin Ratio                 | 2.82              | HI                |                 |       | 2.10   | -     | 2.50   | 2.03   |     | 2.71   |
| Total Protein                         | 6.10              | lo                |                 |       | 7.11   | -     | 7.61   | 6.00   |     | 8.50   |
| Albumin                               | 3.40              | LO                |                 |       | 4.10   | -     | 4.51   | 3.50   |     | 5.50   |
| Alkaline Phosphatase 25-150           | 321.00            | HI                | 913.00          | ©     | 65.00  | -     | 108.00 |        | -   | 160.00 |
| Creatine Kinase                       | 35.00             | lo                |                 | Ŭ     | 64.00  | _     | 133.00 | 24.00  | _   | 173.00 |
| LDH                                   | 268.00            | HI                | 918.00          | ©     | 120.10 | _     | 160.00 | 100.00 | -   | 250.00 |
| SGOT (AST)                            | 52.00             | HI                | 163.00          | ©     | 18.10  | _     | 26.00  | 6.00   | _   | 40.00  |
| SGPT (ALT)                            | 46.00             | HI                | 59.00           | ©     | 18.10  | _     | 26.10  | 6.00   | _   | 40.00  |
| GGT                                   | 270.00            | HI                |                 | 1     | 22.00  | _     | 39.00  | 6.00   | _   | 55.00  |
| Serum Iron                            | 82.00             | lo                |                 |       | 85.10  | _     | 120.00 | 35.00  | _   | 155.00 |
| Ferritin                              | 2,118.00          | HI                |                 |       | 30.10  | _     | 218.30 | 10.00  | _   | 291.00 |
| White Blood Count                     | 3.30              | LO                |                 |       | 5.10   | -     | 8.00   | 4.00   | -   | 10.50  |
| Red Blood Count                       | 4.01              | lo                |                 |       | 4.51   | -     | 5.50   | 3.80   | -   | 5.60   |
| Hemoglobin                            | 12.30             | lo                |                 |       | 13.30  | -     | 15.20  | 11.50  | -   | 17.00  |
| Hematocrit                            | 35.60             | lo                |                 |       | 39.51  | -     | 47.00  | 34.00  |     | 50.00  |
| ESR-Erythrocyte Sed Rate, Westergr    | 37.00             | HI                |                 |       | 0.00   | -     | 8.00   | 0.00   |     | 30.00  |
| CRP C-Reactive Protein                | 20.70             | HI                | 4 400 00        | _     | 0.00   | -     | 1.50   | 0.00   |     | 4.90   |
| CA 19-9                               | 361.00            | HI                | 4,163.00        | 0     | 0.00   | -     | 0.00   | 0.00   |     | 37.00  |
| CEA                                   | 6.20              | HI                |                 | l     | 0.00   | -     | 2.00   | 0.00   | -   | 3.00   |

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The patient also brought in the latest CT scan of his chest which showed multiple nodules had disappeared from the lungs and the three or four that remained were much smaller. A second scan of his abdomen indicated a decrease in metastatic liver disease on both the right and left lobes. At this point, the cancer was still widespread but noticeably less extensive.

# **Doctor analysis:**

**09-21-05** – There are several points of interest on the blood test from September of 2005. Obviously the dramatic reduction of the CA 19-9, CEA and glucose but also the Ferritin, another cancer indicator, was very high. It was not tested before and had most likely improved since the patient began taking supplements, but we will watch this number closely. The high GGT is associated with pancreas function and was most likely affected by the chemotherapy treatment; however it is important to monitor this number because if the pancreas is struggling then diabetic factors can become elevated making glucose regulation difficult. The low white and red blood counts along with the high ESR and CRP are all signs that the body's immune system is not at its peak and is using all available resources to ward off the cancer. At this point, the patient was taking three different chemo drugs (Tarceva, Xeloda and Gem Sar) and one concern

was his continued weight loss. The day of the September blood test he weighed just 128 lbs and his blood pressure was 108/62. We wanted to make sure the patient was consuming enough healthy food to at least maintain that weight. Overall, the patient was holding steady and making good progress. I told him to continue with all supplements, wait one month then do another round of blood tests.

#### **Patient assessment:**

11-05-05 - After just <u>three months</u> under our care, the patient's CA 19-9 showed dramatic results plunging from 4,163 to just 128. Other cancer indicators like the Alkaline Phosphatase, AST and ALT also continuously improved moving out of the clinically very high ranges. The LDH went up slightly but is still significantly lower than in August. Overall, 29 values improved between September 19<sup>th</sup> and November 5, 2005. (Only 14 of those are shown below.)

# **Results of Third Blood Test:**

| Results of Tillia Blood To                       | Current        | Current  | Prior            |               |               |   |                |               |   |                 |
|--|----------------|----------|------------------|---------------|---------------|---|----------------|---------------|---|-----------------|
|  | Result         | Rating   | Result           |               |               |   |                |               |   |                 |
| Test Description Date:                           | 11/05/2005     |          | 09/19/2005       | Delta         | Healthy       |   |                | Clinical      |   |                 |
| Glucose  | 130.00         | HI       | 117.00           | 8             | 80.00         | - | 95.00          | 65.00         | - | 99.00           |
| Hemoglobin A1C (Gly-Hgh)<br>Magnesium            | 5.80<br>1.90   | HI<br>lo | 6.30<br>1.90     | ©<br><u>⊜</u> | 4.61<br>2.21  | - | 5.40<br>2.51   | 4.50<br>1.60  | - | 5.70<br>2.60    |
| Calcium  | 9.00           | lo       | 9.60             | 8             | 9.71          | _ | 10.10          | 8.50          | - | 10.60           |
| Phosphorus                                       | 3.80           | Opt      | 4.10             | ⊕             | 3.41          | - | 4.00           | 2.50          | - | 4.50            |
| Calcium/Albumin Ratio                            | 2.43           | Opt      | 2.82             | ☺             | 2.10          | - | 2.50           | 2.03          | - | 2.71            |
| Total Protein                                    | 5.90           | LO       | 6.10             | 8             | 7.11          | - | 7.61           | 6.00          | - | 8.50            |
| Albumin<br>Alkaline Phosphatase 25-150           | 3.70<br>178.00 | lo<br>HI | 3.40<br>321.00   | 0             | 4.10<br>65.00 | - | 4.51<br>108.00 | 3.50<br>25.00 | - | 5.50<br>160.00  |
| Creatine Kinase                                  | 76.00          | Opt      | 35.00            | ©             | 64.00         | _ | 133.00         | 24.00         | _ | 173.00          |
| LDH  | 388.00         | HI       | 268.00           | 8             | 120.10        | _ | 160.00         | 100.00        | _ | 250.00          |
| SGOT (AST)                                       | 43.00          | HI       | 52.00            | ☺             | 18.10         | - | 26.00          | 6.00          | - | 40.00           |
| SGPT (ALT)                                       | 29.00          | hi       | 46.00            | ☺             | 18.10         | - | 26.10          | 6.00          | - | 40.00           |
| GGT  | 212.00         | HI       | 270.00           | ☺             | 22.00         | - | 39.00          | 6.00          | - | 55.00           |
| Serum Iron                                       | 69.00          | lo       | 82.00            | 8             | 85.10         | - | 120.00         | 35.00         | - | 155.00          |
| Ferritin<br>White Blood Count                    | 567.00<br>4.70 | HI<br>lo | 2,118.00<br>3.30 | 0             | 30.10<br>5.10 | - | 218.30<br>8.00 | 10.00<br>4.00 | - | 291.00<br>10.50 |
| Red Blood Count                                  | 3.49           | LO       | 4.01             | 8             | 4.51          | _ | 5.50           | 3.80          | _ | 5.60            |
| Hemoglobin                                       | 12.10          | lo       | 12.30            | 8             | 13.30         | - | 15.20          | 11.50         | - | 17.00           |
| Hematocrit<br>ESR-Erythrocyte Sed Rate, Westergr | 35.20<br>28.00 | lo<br>hi | 35.60<br>37.00   | 8             | 39.51<br>0.00 | - | 47.00<br>8.00  | 34.00<br>0.00 | - | 50.00<br>30.00  |
| CRP C-Reactive Protein                           | 6.40           | HI       | 20.70            | 0             | 0.00          | - | 1.50           | 0.00          | - | 4.90            |
| CA 19-9  | 128.00         | HI       | 361.00           | ©             | 0.00          | - | 0.00           | 0.00          | - | 37.00           |
| CEA  |                |          | 6.20             | l             | 0.00          | - | 2.00           | 0.00          | - | 3.00            |

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Some of the values that were worse can be attributed to the cancer treatment. Low protein, poor digestion and anemia account for the others. The patient's night sweats were gone; he no longer had difficulty swallowing and was off the prescriptions Doxycicline and Vicadin. He also started to gain

weight and was up to 145 lbs. The patient brought in results from the latest abdomen and chest CT scans and no new lesions were identified on the lungs. Doctors also found no growth in nodules on the liver indicating that the cancer was stable. There was no change in the patient's gallstones. At this time, the patient was still undergoing chemotherapy and doctor's told him that radiation and surgery to remove the remaining cancer were not possibilities.

# **Dr. Merkle's Final Thoughts:**

When I first saw this patient in August of 2005, I knew he was close to death. He was gray, gaunt and looked very bad. Reviewing the preliminary blood work he brought to the initial appointment confirmed what I suspected. I thought, "He will be dead by Christmas and lucky to see Thanksgiving." Fortunately I didn't tell him that. He was so bad by the time the cancer was detected that he didn't respond to the first round of chemotherapy and it was stopped immediately.

With all options exhausted he came to see me. I ordered another blood test and found the cancer was spreading rapidly, climbing 512 points in just 11 days. In his case there was no time to waste. I placed him on a start-up vitamin list based on the severity of his condition and ordered additional blood testing to help me fine tune his nutrient and dietary recommendations to include exactly what his system needed to fight off the liver and lung cancer. It worked better than I could have imagined. He started feeling better almost immediately and shortly thereafter decided to resume chemotherapy treatment. By November his cancer marker dropped a total of 4,035 points and the nodules on his lungs and liver had either disappeared or significantly decreased in size. I'm still amazed he felt well enough to go skiing that December, but the patient said he felt good and didn't get too tired.

**November Blood Values Compared To August:** 

| toronibor 2:00a raidos comparca roziagasti |       |            |         |            |       |         |   |        |          |   |        |  |  |
|--|-------|------------|---------|------------|-------|---------|---|--------|----------|---|--------|--|--|
|  |       | Current    | Current | Prior      |       |         |   |        |          |   |        |  |  |
|  |       | Result     | Rating  | Result     |       |         |   |        |          |   |        |  |  |
| Test Description                           | Date: | 11/05/2005 |         | 08/10/2005 | Delta | Healthy |   |        | Clinical |   |        |  |  |
| Alkaline Phosphatase 25-150                |       | 178.00     | HI      | 913.00     | 0     | 65.00   | - | 108.00 | 25.00    | - | 160.00 |  |  |
| Creatine Kinase                            |       | 76.00      | Opt     |            |       | 64.00   | - | 133.00 | 24.00    | - | 173.00 |  |  |
| LDH  |       | 388.00     | HI      | 918.00     | ☺     | 120.10  | - | 160.00 | 100.00   | - | 250.00 |  |  |
| SGOT (AST)                                 |       | 43.00      | HI      | 163.00     | ☺     | 18.10   | - | 26.00  | 6.00     | - | 40.00  |  |  |
| SGPT (ALT)                                 |       | 29.00      | hi      | 59.00      | ☺     | 18.10   | - | 26.10  | 6.00     | - | 40.00  |  |  |
| CA 19-9                                    |       | 128.00     | HI      | 4,163.00   | 0     | 0.00    | - | 0.00   | 0.00     | - | 37.00  |  |  |

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One of the main reasons this patient was driven to battle the disease and in turn saw such amazing results was a great family support system. They understood the gravity of the situation and encouraged him to stick to his diet and keep up with the recommended supplements. Was the

chemotherapy of benefit? I don't know. I would have liked him to wait a few more weeks to see how rapidly he improved, but because he was feeling better his oncologist talked him into continuing with chemotherapy.

I saw the patient for the last time in January of 2006. He was feeling very good, had gained a little more weight and had a steady energy level. Unfortunately, he never returned to my office or consulted with me again. I am not sure when he quit, modified or reduced the supplements I recommended or his diet, but he died a year later.

I believe chemotherapy weakens the immune system and when the cancer returns it becomes more virulent and less responsive to the chemo and radiation. Doctors then resort to stronger doses of drugs resulting in more damage to the patient's immune system. This is why it's typically the third or fourth rounds of cancer that patient's are unable to survive. My recommendations are based on results seen in a patient's blood work and tissue mineral analysis. No two cancer patients are the same and patients who have a relapse may be placed on a different supplement regimen than they had for the first diagnosis. To efficiently ward cancer out of the body, we must test and retest to ensure the body is consistently getting healthier. Even though this patient did not survive, he and his family were blessed with a few extra months of quality living together. I'm sure they were grateful for this time, but I wonder what could have been if the patient had stuck with my recommendations.

Let me say in closing that I do not have a cure for cancer and I did not treat this patient's cancer. His body already knew how to fight the disease and by determining what was deficient, imbalanced, dysfunctional or toxic and correcting it with the proper diet and vitamins, his body was then able to defeat the cancer. As the body gets healthier, it's amazing what can happen.

-Dr. Van D. Merkle

This case report showcases a real patient's results using the Science Based Nutrition™ system of analysis, which takes into account hundreds of numeric data and their roles, combinations and inter-relationships as related to disease diagnosis. This patient is/was under the care of Dr. Van D. Merkle, creator and founder of Science Based Nutrition™, Inc. and is meant to serve as an example of results achieved using the Science Based Nutrition™ report. Contact your local health professional and ask him/her to provide you with the Science Based Nutrition™ report. Results will vary based on patient ability/willingness to follow the recommended nutritional protocols, among many other factors. Any suggested nutritional advice or dietary advice is not intended as a primary treatment and/or therapy for any disease or particular bodily symptom. Nutritional counseling, vitamin recommendations, nutritional advice, and the adjunctive schedule of nutrition is provided solely to upgrade the quality of foods in the patient's diet in order to supply good nutrition supporting the physiological and biomechanical process of the human body.