

TC based on Doc Body (offset is 1:07)

BAD SUGAR

Opening scene: shots of water falling

DIET AND EXERCISE, DRUGS AND MEDICAL CARE...THESE ARE WHAT WE USUALLY ASSOCIATE WITH HEALTH.

BUT WHAT WE DON'T THINK ABOUT ARE STRUCTURES.

NOT JUST PHYSICAL STRUCTURES. BUT ECONOMIC, POLITICAL AND SOCIAL STRUCTURES...THEY MAY BE HARD TO SEE, YET THEY CAN BE POWERFUL DETERMINANTS OF OUR HEALTH.

0:27

Sign of Tohono O'odham reservation

TERROL DEW JOHNSON V/O:

We've been doing a series of photos for a book...I never get tired of taking pictures of the desert.

Terrol preparing camera; Tracking shot of desert

TERROL DEW JOHNSON IS A MEMBER OF THE TOHONO O'ODHAM AMERICAN INDIAN TRIBE. TERROL IS AN ARTIST AND AN ACTIVIST ON THE RESERVATION SOUTH OF PHOENIX, ARIZONA.

0:55

TERROL DEW JOHNSON O/C and V/O:

How was Hopi? What'd you guys do?

FOR THE LAST FORTY YEARS¹, THE TRIBE HAS SUFFERED THE HIGHEST RATE OF TYPE II DIABETES IN THE WORLD².

Snapping photos of abandoned home with girls

HALF OF TOHONO O'ODHAM ADULTS HAVE TYPE II DIABETES...³

TERROL DEW JOHNSON O/C:

She died.

MORE THAN SEVEN TIMES THE NATIONAL AVERAGE.⁴

Snapshot of little girl in tire swing

¹ Confirmation from Tristan Reader, Co-Director, Tohono O'odham Community Action, 11.27.06

² Confirmation from Tristan Reader, Co-Director, Tohono O'odham Community Action, 11.27.06; "USDA Community Food Project Grantee Organization Profile," Food Security Learning Center; Blain, et al, "O'odham Himdag as a source of strength and wellness among the Tohono O'odham of Southern Arizona and Northern Sonora, Mexico," *Journal of Sociology & Social Welfare*, March 2002; "Closing the Gap: Solutions to Race-Based Health Disparities," Applied Research Center and Northwest Federation of Community Organizations, June 2005

³ Ibid

⁴ American Diabetes Association, "Total Prevalence of Diabetes & Pre-Diabetes", printed on 10/4/06; CDC, National Diabetes Fact Sheet, 2005

RATES FOR CHILDREN ARE CLIMBING RAPIDLY.⁵

Terrol walking with little girl outside

TERROL DEW JOHNSON O/C:
Are you staying with grandma? Go with them...you're going to go to the party. You can go swim. We'll see you later. Bye you guys.

Blue sky with clouds

1:30

FOR HUNDREDS OF YEARS, THE O'ODHAM LIVED SELF-SUFFICIENTLY ON TEPARY BEANS, CHOLLA BUDS, LOCAL GAME,

Wide landscape shot

CROPS IRRIGATED BY RAIN AND GROUND WATER. THEIR WAY OF LIFE KEPT THEM HEALTHY.

Barren land

TODAY, THAT HAS CHANGED.

Terrol photographing old man outside of house

1:53

TERROL DEW JOHNSON V/O:
Danny, I was just asking people when I was taking pictures of them, how diabetes affects them. If it does affect them. What their thoughts are about that.

Danny sitting in chair being photographed

2:15

DANNY LOPEZ V/O:
I think some people they get kind of depressed. Somebody had stated well

LOWER THIRD: DANIEL LOPEZ
Tohono O'odham Elder

DANNY LOPEZ, O/C:
my mom and my sister say I have diabetes so, I'll probably get it anyway. So that kind of, that attitude that you know, that you're going to eventually going to get it, you know.

Close up of Danny's glasses

TERROL DEW JOHNSON, V/O:
A lot of people in my family

LOWER THIRD: TERROL DEW JOHNSON
Artist/Activist

TERROL DEW JOHNSON, O/C:
and around me have diabetes. Some...somehow, I always thought well, ok, that's just part of growing up.

⁵ "Increasing prevalence of Type II diabetes in American Indian children", National Institute of Diabetes and Digestive Kidney Diseases, National Institutes of Health, Diabetologia (1998) 41:904-910, Phoenix, AZ; Confirmation from Dr. Clifton Bogardus, Chief, Epidemiology & Clinical Research Branch NIDDK, NIH, 11.7.06

Stills of accordion player & family at grave

TERROL DEW JOHNSON V/O:
But, they never said they had diabetes. They've always said that I just have bad sugar. I've actually had family members die on the operating table during the process of an amputation.

Danny being photographed in chair

2:44

DANNY LOPEZ, O/C:
He lost his leg.

TERROL DEW JOHNSON , O/C:
Oh, he did!

DANNY LOPEZ, O/C:
A couple of weeks ago. Yeah.

TERROL DEW JOHNSON , O/C:
Oh no.

DANNY LOPEZ, O/C:
He was at the Elder's Conference. He was in the wheelchair.

TERROL DEW JOHNSON V/O:
A lot of peoples still don't know.

Reservation Map

Arizona highway in desert, zoom on sign of Tohono Reservation

FURTHER NORTH IS THE GILA RIVER RESERVATION, HOME TO THE PIMA.

3:08

HENRIETTA LOPEZ V/O:
We're the same O'odham tribe, it's just that

LOWER THIRD: HENRIETTA LOPEZ
Public InV/olvement Specialist
Pima-Maricopa Irrigation Project

HENRIETTA LOPEZ O/C:
They're desert people, which is To'hono. And we're Achimel O'odham which we live by the river .

Henrietta with colleague pointing at an irrigation canal

HENRIETTA LOPEZ O/C:
See where those little mountains are at? The river is just on the south...probably at the base of that mountain there.

HENRIETTA LOPEZ WORKS WITH THE PIMA-MARICOPA IRRIGATION PROJECT.

Reverse of Henrietta talking to a colleague

DR. PETER BENNETT O/C:
...these are files that are being collected from our longitudinal studies.

Close up of records

THE NATIONAL INSTITUTES OF HEALTH COLLECTED HUNDREDS OF THOUSANDS OF PIMA BLOOD SAMPLES, TISSUE BIOPSIES, AND MEDICAL HISTORIES.⁷

Dr. Peter Bennett describing records

DR. PETER BENNETT O/C:
Our collection of EKGs...

Dr. Peter Bennett at the office

DR. PETER BENNETT HAS DEVOTED MOST OF HIS PROFESSIONAL LIFE TO STUDYING DIABETES AMONG THE PIMA. 5:10

Medical convention center

AFTER 40 YEARS, 200 MILLION DOLLARS WORTH OF RESEARCH HAS INCREASED OUR UNDERSTANDING OF THE BIOCHEMISTRY OF DIABETES.⁸ BUT NEITHER THE CAUSE NOR A CURE HAS BEEN DISCOVERED.⁹ AND RATES AMONG THE PIMA, CONTINUE TO RISE.¹⁰

Close-up of hands handling test tubes

5:28

LIKE MANY RESEARCHERS, BENNETT NOW TURNS HIS ATTENTION TO GENES FOR ANSWERS.

Dr. Peter Bennett address a researcher

DR. PETER BENNETT O/C:
So, how's it going?

Interview with Dr. Peter Bennett

DR. PETER BENNETT V/O:
The genetics of diabetes has turned out to be really quite complicated.

LOWER THIRD: PETER BENNETT, MD
Scientist Emeritus
National Institutes of Health

DR. PETER BENNETT O/C:
It appears that there are not just one or even two genes involved in the pre-disposition.

⁷ Confirmation from Dr. Peter Bennett, Scientist Emeritus, NIH, 1/8/07; Confirmation from Marcia Vital, Deputy Director, Office of Communications & Public Liason, National Institute of Health, 12/15/06

⁸ Confirmation from Marcia Vital, Deputy Director, Office of Communications & Public Liason, National Institute of Health, 9.28.06

⁹ Luo, T.H.; Zhao, Y., et al, "A genome wide search for Type II diabetes susceptibility genes in Chinese Hans"; *Diabetologia* (2001) 44: 501-506; Dr. Peter Bennett, NIH, reiterates directly following; Confirmation from Dr. Clifton Bogardus, Chief, Epidemiology & Clinical Research Branch NIDDK, NIH, 11.7.06 (KT)

¹⁰ Confirmation from Dr. Clifton Bogardus, Chief, Epidemiology & Clinical Research Branch NIDDK, NIH, 11.7.06

Close-up of hands preparing test tube with syringe, researcher

DR. PETER BENNETT V/O:
In fact, today, we still don't know what combinations of gene abnormalities

DR. PETER BENNETT O/C:
really lead to very high risk of the disease. 5:53

Newspaper article: Chinese Hans

Newspaper article: Finns

BUT RESEARCH HAS SHOWN THAT WHATEVER GENES MIGHT INCREASE THE RISK OF DIABETES ARE IN FACT FOUND THE WORLD OVER,

Newspaper article: French Caucasians

NOT JUST AMONG THE PIMA.¹¹ AND WHETHER THEY HAVE THE GENES OR NOT,

SOME POPULATIONS DO HAVE A HIGHER INCIDENCE OF DISEASE.¹²

Dr. Peter Bennett examining computer screen 6:12

DR. PETER BENNETT O/C:
Very, very dramatic figures. These are not our own data but from a paper a couple of years ago.

Crowded ferry

**NARRATION:
PACIFIC ISLANDERS,**

Urban street

AFRICAN AMERICANS,

Close-up of blood pressure being taken

ABORIGINAL PEOPLES IN AUSTRALIA, ALL SUFFER FROM TYPE TWO DIABETES AT RATES DOUBLE OR TRIPLE THE NATIONAL AVERAGES.¹³

6:32

Shots of African-American construction worker, Food stand, two Marshallese children

¹¹ Luo, T.H.; Zhao, Y.; Li, G; Yuan, W.T.; Zhao, J.J.; Chen, J.L.; Huang, W.; Luo, M.; "A genome wide search for Type II diabetes susceptibility genes in Chinese Hans"; *Diabetologia* (2001) 44: 501-506; Confirmation from with Dr. Clifton Bogardus; Articles in film

¹² Pratley, Richard E., "Gene-environment interactions in the pathogenesis of type 2 diabetes mellitus: lessons learned from the Pima Indians," *Proceedings of the Nutrition Society*, (1998), 57, 175-181; Articles in Film

¹³ CDC National Diabetes Fact Sheet; Unnatural Causes, *Collateral Damage* program (see sources for diabetes rates among Marshallese); Diabetes Australia, Diabetes Fact Sheet

LOWER THIRD: DONALD WARNE, M.D.
President & CEO
American Indian Health Management & Policy

DR. DONALD WARNE O/C:
Well, I went into my modern medical training kind of naively thinking that I was gonna make an impact on Indian health as a primary care physician.

Dr. Donald Warne examines x-ray images

WARNE HAS TREATED NATIVE AMERICAN TRIBES IN ARIZONA FOR YEARS. HE'S ALSO A HEALTH POLICY CONSULTANT FROM A FAMILY OF LAKOTA TRADITIONAL HEALERS. ^{14A}

8:11

DR. DONALD WARNE V/O:
...and in truth, it can have an impact on the individual's lives and their healthcare.

DR. DONALD WARNE O/C:
And that's very significant and meaningful. But the health problems occur long before people get to the clinic or to the hospital.

HEX Animation

8:22

WHEN DR. WARNE'S PATIENTS HAVE TYPE II DIABETES, THEIR BODIES MAKE THE INSULIN NEEDED TO CONVERT GLUCOSE—OR BLOOD SUGAR— INTO ENERGY BUT THE INSULIN ISN'T USED EFFICIENTLY. GLUCOSE THEN BUILDS UP IN THEIR BLOOD STREAM AND CAN CHOK OFF SMALL BLOOD VESSELS.¹⁵ LEADING TO BLINDNESS, KIDNEY FAILURE, AMPUTATION. ¹⁶

Surgeons operating on patient

Close-up of menu at Pima dining hall

DIETS HIGH IN SUGAR, FAT AND CARBOHYDRATES CAN ELEVATE GLUCOSE LEVELS. ¹⁷

Close-up of tongs grabbing fried food

BUT SOMETHING ELSE INCREASES THOSE LEVELS AS WELL...

Tracking shot of Pima reservation

8:59

DR. DONALD WARNE V/O:
There is a direct biochemical connection between living in poverty and the stress that people are under and blood sugar control. ¹⁸

^{14A} Confirmation from Dr. Donald Warne, 6/15/07

¹⁵ - Facts 15-20, approved by medical animation advisors Judith Saide, Associate Professor of Physiology and Biophysics, Boston University, and James Head, Professor of Physiology, Boston University; American Diabetes Assoc. "Hyperglycemia," <http://www.diabetes.org/type-2-diabetes/hyperglycemia.jsp>, 1 Nov 2006

¹⁶ American Diabetes Assoc. "Type 2 Diabetes Complications," <http://www.diabetes.org/type-2-diabetes/complications.jsp>, 8 Nov 2006

¹⁷ Centers for Disease Control. "Physical Activity and Good Nutrition" <http://www.diabetes.org/type-2-diabetes/complications.jsp>, 17 July 2006

¹⁸ Kelly, WF; Mahmood, R; Turner, S; Elliott, K; "Geographical mapping of diabetic patients from the deprived inner city shows less insulin therapy and more hyperglycemia," *Diabetic Medicine*, 1994 May, 11(4):344-8; Holben, DH; Pheley, AM; "Diabetes risk and obesity in food-insecure households in rural Appalachian Ohio," *Preventing Chronic*

DR. DONAL WARNE O/C:

When we look at measures of stress we look at different types of hormones like cortisol or epinephrine, which is adrenalin. All of those chemicals increase blood sugar.¹⁹

AND WHEN STRESS HORMONES REMAIN HIGH, THEY CONTINUE TO TRIGGER PRODUCTION OF GLUCOSE. GLUCOSE BUILDS UP IN THE BLOODSTREAM, LEADING TO DIABETES.²⁰

9:32

Dr. Warne turns off X-Ray

New York Times article

DIABETES IN AMERICA HAS REACHED EPIDEMIC PROPORTIONS.^{20A} WE SPEND OVER \$132 BILLION DOLLARS A YEAR TO TREAT IT.^{20B} OBESITY IS A RISK FACTOR, AND A THIRD OF US ARE OBESE.^{20C} BUT THE OTHER CRITICAL RISK FACTOR IS LOW INCOME.

Diabetes income chart

AMERICANS IN THE LOWEST INCOME BRACKETS ARE AT LEAST TWICE AS LIKELY THAN THOSE IN THE HIGHEST TO BECOME DIABETIC.^{20D}

Pima children play basketball

DR. WARNE MIGHT LIKE TO PRESCRIBE AFFLUENCE, BUT INSTEAD, HE PRESCRIBES A CHANGE OF DIET, MORE EXERCISE, AND IF THIS FAILS, MEDICATION AND INSULIN INJECTIONS.

Close-up of photos of Terrol's sister preparing and injecting insulin on computer screen

TERROL DEW JOHNSON V/O:

That's a picture of my sister. She has to take two shots of the syringes. She has to fill them up to the max and she takes them on both sides of her belly. And her doctors said that her kidneys will go. But she told me that, with this amount, I'm alright for right now, she said. Which really bummed me out, I was sad.

Interview with Terrol

10:40

TERROL O/C:

I'm a diabetic, I found out in 96.

Disease, 2006 Jul;3(3):A82. Epub 2006 Jun 15.; Hopper SV, Scechtman, KB; "Factor Associated with diabetic control and utilization patterns in a low-income, older adult population," *Patient Educ Couns*. 1985 Sep;7(3):275-88.

¹⁹ WebMD. http://www.webmd.com/content/pages/10/1667_50239.htm citing Diana W. Guthrie, R.N., Ph.D., and Richard A. Guthrie, M.D. *From The Diabetes Sourcebook: Today's Methods and Ways to Give Yourself the Best Care*. Los Angeles: Lowell House, 1999

²⁰ Ibid

^{20A} American Diabetes Association, "Total Prevalence of Diabetes & Pre-Diabetes", printed on 10/4/06; CDC, National Diabetes Fact Sheet, 2005

^{20B} CDC, National Diabetes Fact Sheet, 2005

^{20C} CDC, National Center for Health Statistics, "Obesity Still a Major Problem," Fact Sheet, April 14, 2006,

www.cdc.gov/nchs/pressroom/06facts/obesity03_04.htm

^{20D} NHANES, 1999-2004

Photos on computer screen of pills and Terrol taking them

TERROL V/O:

And so they gave me some pills and boom. You know, I was stamped and approved and put on that list of diabetics in the native community.

ACT TWO

Images of Battles, mass graves

THE GENOCIDE OF NATIVE AMERICAN PEOPLES MAY BE A FAMILIAR STORY, BUT ITS UNFOLDING VARIED FROM TRIBE TO TRIBE AND PLACE TO PLACE. TO UNDERSTAND ITS CONTINUING IMPACT ON THE HEALTH OF THE PIMA TODAY, WE NEED NOT LOOK FAR BEYOND ONE SERIES OF EVENTS.

11:27

Close-ups on farm hoe

ROD LEWIS V/O:

There is direct connection between the diversion of water in the upper Gila River...and the health status and economic status of the Pimas and Maricopas....²¹

Arizona plain

LOWER THIRD: ROD LEWIS
Former General Counsel
Gila River Indian Community

ROD LEWIS O/C

In the 1890s, water simply stopped coming down the Gila River. ²²

River Diversion Map^{22A}

UPSTREAM, WATER FROM THE GILA WAS DIVERTED BY DAMS & WATER PROJECTS, GIVING WHITE SETTLERS, FARMERS, RANCHERS AND MINING INTERESTS THE WATER THEY NEEDED.
²³

Historical NARA photographs of farmers

ROD LEWISH V/O:

And we were depended on that water to grow crops, to provide for ourselves.

11:57

NOT EVEN THE 1908 SUPREME COURT DECISION UPHOLDING WATER RIGHTS FOR ALL NATIVE AMERICANS COULD PROTECT THE PIMA. ²⁴

²¹ Lewis and Hestand, "Federal Reserved Water Rights: Gila River Indian Community Settlement," *Journal of Contemporary Water Research & Education*, May 2006; History of the Gila River Water Settlement Act of 2004, www.gilariver.com/settlement.htm; Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06

²² Ibid

^{22A} History of the Gila River Water Settlement Act of 2004, www.gilariver.com/settlement.htm; Confirmation from David DeJong, Pima-Maricopa Irrigation Project, 2/6/07

²³ Ibid, Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06

Historical footage of Coolidge Dam, and inaugural ceremony

THE COOLIDGE DAM. IN 1930, ONE OF THE LARGEST IN THE WORLD.²⁵ ITS PROMISE – TO PROVIDE WATER FOR EVERYONE, THIS TIME INCLUDING THE PIMA. FORMER PRESIDENT CALVIN COOLDIGE CELEBRATED ITS OPENING WITH POLITICIANS AND BUSINESSMEN. THEY DINED ON CHINA, CRYSTAL AND LINEN. THE PIMA ATE BAG LUNCHES ON MAKESHIFT TABLES.^{25A} 12:40

COOLIDGE PASSED THE PEACEPIPE, BUT IN THE END, THE PIMA GOT LITTLE OF THE WATER. AGAIN.²⁶

Smoking of the peacepipe

ROD LEWIS V/O:
We were practically without water for almost an entire century.

ROD LEWIS O/C:
We were among the poorest people in the United States of America...

Historical photos of Pima farmers

ROD LEWIS V/O
...as are Indians who live on other reservations and still are in that situation.^{26A} Unable to grow crops, unable to get out and work in the fields...

ROD LEWIS O/C
...unable to develop economically because of the lack of water for almost a hundred years, it was just, it's an absolute shame as far as this country is concerned, as far as the State of Arizona is concerned.

Zoom out on Sacaton Diversion Dam

13:20

DOCTOR WARNE V/O:
What is a metaphor for the rest of the country to try to think about in terms of damming the rivers?

DOCTOR WARNE O/C:
It would be like saying to this entire country, okay, survive now without money. And how would you do that? How would you change your entire economy, how would you change your entire culture? How would you change your entire lifestyle? And would you be successful? Would people die? 13:44

Still of starving Pima

²⁴ Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06, Lewis and Hestand, "Federal Reserved Water Rights: Gila River Indian Community Settlement," *Journal of Contemporary Water Research & Education*, May 2006

²⁵ Arizona State Library, Archives and Public Records, Cultural Inventory Project "Ceremonies at dam, 4 March 1930. Includes President Calvin Coolidge, news, cameras, crowds, and Apache Indians"; *Time Magazine*, Mar 17, 1930

^{25A} Dam footage documents this

²⁶ Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06, "Dam Dedicator," *Time Magazine*, Mar 17, 1930

^{26A} Ezell, Paul, "Handbook of North American Indians," *Smithsonian*, Vol 10, 1983, US Census Bureau, The Brookings Institute

AND THE PIMA DID DIE. BUT THEY DIED FROM STARVATION, NOT FROM DIABETES. ²⁷

Surveys

A SURVEY CONDUCTED IN 1902 FOUND ONLY 1 CASE OF DIABETES AMONG THE PIMA. ²⁸ **BUT WITHIN 30 YEARS OF BUILDING THE COOLIDGE DAM, THERE WERE MORE THAN 500.** ²⁹

Aerial footage of Arizona landscape, resorts, boats

14:07

DOCTOR WARNE V/O:

If we had not dammed the rivers back in the 1920's and 1930's, we wouldn't be able to have this lifestyle that we enjoy in Arizona with the swimming pools and golf courses and artificial lakes. And with this lifestyle we are really living outside the laws of nature.

Zoom out from golf course

DOCTOR WARNE V/O:

And what people, I think, generally speaking don't realize is that all of the prosperity of Phoenix

DOCTOR WARNE O/C:

and the prosperity of this entire state was built on the backs of the health of the local tribes.

Commodity Foods warehouse

ROD LEWIS O/C & V/O:

Pimas lived a very, very difficult life at the bottom of the economic scale. We had almost no recourse except to become dependant upon governmental benefits.

Close-ups of boxes, canned pork, flour, instant mashed potatoes

SHORTLY AFTER THE DAMS WERE BUILT, THE US MILITARY BEGAN DISTRIBUTING FREE COMMODITY FOODS TO NATIVE AMERICANS. ³⁰

TERROL DEW JOHNSON V/O:

14:59

And, it definitely brought us through the hard times.

Terrol photographing commodities building, dolly shot of boxes in warehouse

²⁷ -"Indians Starving to Death: Six Thousand Perishing on Gila Reservation in Arizona Because of Famine of Crops," *Chicago Tribune, June 17, 1900*; History of the Gila River Water Settlement Act of 2004, www.gilariver.com/settlement.htm

²⁸ Hrdlicka A (1 908) *Physiological and Medical Observations among the Indians of Southwestern United States and Northern Mexico*. Bureau of American Ethnology Bulletin no. 24. Washington, DC: Smithsonian Institute.

²⁹ Bennett, Peter H, "Type 2 diabetes among the Pima Indians of Arizona: An Epidemic attributable to environmental change?", *Nutrition Review, May, 1999*; email from Dr. Peter Bennett, 1/12/07; CHART adapted from Bennett, PH et al., *Lancet*, 1971, 2, 125 and approved by Bennett; Pratley, Richard E., "Gene-environment interactions in the pathogenesis of type 2 diabetes mellitus: lessons learned from the Pima Indians," *Proceedings of the Nutrition Society* (1998), 57, 175-181.

³⁰ United States Department of Agriculture, History of the Food Distribution Program, www.fns.usda.gov/fdd/aboutfdp/fd-history.pdf; Confirmation from Nancy Theodore, Policy Branch, USDA, 2/22/07

TERROL DEW JOHNSON V/O:

This is the commodities building, where they house the commodity food. This is where people used to come get their cheese, their beans and their grape juice and stuff. There used to be just rows and rows and rows of those.

Low-angle canned food being transported

15:18

BUT THIS SURPLUS FOOD – WHITE FLOUR, CHEESE, REFINED SUGAR, LARD, CANNED FOODS – IS A DIABETIC’S NIGHTMARE. AS IT WAS FOR TERROL’S NEIGHBOR...

Terrol outside

LOWER THIRD: TERROL DEW JOHNSON
 Artist/Activist

TERROL DEW JOHNSON O/C:

They asked her ‘how many people were in her household’ and she said ‘about five’ and the guy said ‘well you can get five boxes of food’.

Boxes of food being transported through warehouse, dolly shot of food shelves

TERROL DEW JOHNSON V/O:

And there was chips and candy and canned food and I thought, well that’s an idea...that’s a nice idea about having food, but it’s just the wrong kind of food.

Terrol outside

TERROL DEW JOHNSON O/C:

And I asked her, I said so what kind, was their any kind of normal food? She goes, ‘well there were cans of gravy.’

Long shot of food commodity building

15:53

IT WAS NOT UNTIL 1996 THAT FRESH PRODUCE WAS OFFERED IN THE PROGRAM. AND AUTHENTIC TRADITIONAL FOODS ARE STILL NOT INCLUDED.³¹

Close-up of menu for Pima fast food, two vendors preparing fry bread

DR DONALD WARNE V/O:

When we think of traditional American Indian food for example, fry bread is one of the things that comes to mind. Well in truth, tribes did not have fried bread historically. The roots of fry bread are in the commodity food program.^{31A} And fry bread is essentially, trying to do the best that you can with your commodities: flour, lard and vegetable shortening. Over generations, when people grow up with that, it becomes a part of the culture. It becomes acculturated into the community, that that is part of the norm.

Woman shopping in market

16:36

³¹ibid

^{31A} Smith, Janell & Wiedman, Dennis, “Fat Content of South Florida Indian frybread: Health implications for a pervasive Native American Food,” *Journal of the American Dietetic Association*, May 2001 Vol 101, No. 5;

THERE IS ONLY ONE SMALL MARKET ON THE 581 SQUARE MILE GILA RIVER RESERVATION, WITH A SMALL PRODUCE SECTION.^{32A}

A REGULAR SUPERMARKET IS AN HOUR'S ROUNDTRIP DRIVE.

DONALD WARNE O/C:

If you're in an impoverished community and you don't have healthy choices for food, and you don't have safe places to exercise. You are tremendously disempowered when it comes to a disease like diabetes.

Overweight woman entering store

DONALD WARNE V/O:

And that has nothing to do with how much medication is in the pharmacy, it has everything to do with social determinants of health, which include that sense of control, that sense of self empowerment that is important to all of us, whether we're native or non-native. It has an impact on self-identity and it has an impact on one's sense of hope for the future.

Henrietta Lopez in car

HENRIETTA LOPEZ V/O:

Some of our people have just given up. Our people lost our identity, when we lost our water. Within our community we have elders that have gone...I always have that in the back of my mind, that those people will never see the water. When I leave the reservation and I see

LOWER THIRD: HENRIETTA LOPEZ
Public Involvement Specialist
Pima-Maricopa Irrigation Project

HENRIETTA LOPEZ O/C:

17:43

those same people that live out there and use that water. How they've benefited from our loss. They've benefited so much for so many years.

Large real estate development

DECISIONS TO BENEFIT SOME ARE MADE EVERY DAY. THEY CREATE WINNERS AND LOSERS, IN WEALTH AND IN HEALTH.

Arizona b-roll shots

IN UPSCALE CITIES LIKE SCOTTSDALE, ARIZONA, THE DIABETES RATE IS ONLY AROUND 5%. IN LESS AFFLUENT TOWNS LIKE BULLHEAD CITY, THE RATE IS CLOSER TO 11%. AND ON SOME POOR NATIVE AMERICAN RESERVATIONS, IT CONTINUES TO BE 50%.³³

Shot of boy running

³² Northern Arizona University, Center for American Indian Economic Development, <http://www.cba.nau.edu/caied/TribePages/GRIC.asp>

^{32A} Confirmation per field notes from Producer, Jim Fortier, 3/5/07

³³ Center for Disease Control, Behavioral Risk Factor Surveillance System, "Prevalence Data, Arizona, 2005, Diabetes," <http://apps.nccd.cdc.gov/brfss/income.asp?cat=DB&yr=2005&qkey=1363&state=AZ>

THIS IS A DISEASE PATTERN REPEATED ACROSS THE COUNTRY. ACROSS THE WORLD. AND NOT JUST FOR DIABETES. WHETHER YOU ARE POOR OR WEALTHY OR IN BETWEEN, IS A POWERFUL PREDICTOR OF HOW HEALTHY YOUR LIFE WILL BE.

Cactus and mountains at sunset

18:50

ACT THREE

Terrol photographing Margaret basket-weaving

TERROL DEW JOHNSON O/C:
So, Margaret, How long have you been a diabetic?

Close-up of Margaret basket-weaving

MARGARET ACOSTA V/O:
Oh gosh, about 30, 36 years, something like that. Maybe even closer to 40.

Terrol photographing Margaret, close-up on Margaret

LOWER THIRD: MARGARET ACOSTA 19:05
Tohono O’odham Elder

MARGARET ACOSTA O/C:
I am losing my eyesight, and my left eye is worse than my right eye.

TERROL DEW JOHNSON V/O:
Really?

MARGARET ACOSTA O/C:
From diabetes.

Margaret basket-weaving

MARGARET ACOSTA IS A RESPECTED TOHONO O’ODHAM ELDER AND CRAFTSPERSON. SHE’S ONE OF TERROL’S TEACHERS.

MARGARET ACOSTA O/C:
In the past 3 weeks, I have been a little bit more serious taking my sugar count as often as I should.

TERROL DEW JOHNSON O/C:
It’s really, really hard....

MANAGING DIABETES IS DEMANDING...TAKING BLOOD SUGAR COUNTS FOUR TIMES A DAY, MONITORING DIET, STAYING PRODUCTIVE AND ENGAGED.^{33A}

TERROL DEW JOHNSON O/C:
So Margaret, do you think diabetes will get you at the end?

MARGARET ACOSTA O/C:
Uh huh, I know, I know so. 19:49

^{33A} Confirmation from representative at American Diabetes Association

TERROL DEW JOHNSON O/C:
How does that make you feel?

MARGARET ACOSTA O/C:
Well I keep telling everybody, I'm going to live 'til I'm 100, and I am going to live 'til I'm 100, I tell that to diabetes every day. You're not going to get me yet.

Close-ups on Margaret weaving

20:10

STUDIES CONFIRM THAT HOPEFULNESS HELPS TO MANAGE DIABETES.³⁴ BUT FOR THE O'ODHAM, HOPEFULNESS HAS BEEN IN SHORT SUPPLY...UP TO NOW.

Terrol looking at camera

TERROL O/C:
I think I got my shot.

Irrigation canal, bridge, close-up on water, pipes, trucks

ROD LEWIS V/O:
We have a hundred years of neglect and poverty to make up for. We have to put in water delivery systems. We have to put in paved roads. We have to put in the hospitals and schools. We're a long ways behind most other segments of

ROD LEWIS O/C:
American society both in Arizona and nationally.

Zoom out of newspaper article: Session on western water rights

20:52

REGAINING WATER IS A HIGH PRIORITY. THE PIMA HAVE BEEN FIGHTING FOR THEIR WATER RIGHTS FOR CENTURIES, FACING OPPOSITION BY NON-TRIBAL ECONOMIC INTERESTS, AND SKEPTICISM AND RESISTANCE AT HIGH POLITICAL LEVELS.³⁵

ROD LEWIS O/C:
it was difficult, and there was, underlying all this, was I believe a lot of...um... not racial hostility...hostility...but a lot of feelings about tribes that... we didn't deserve the water,

Newspaper article: The New Water Czars

ROD LEWIS V/O:
...we didn't deserve to be in these negotiations, we didn't have a good strong valid claim for water.

Zoom in on article passages

21:27

³⁴Richman, Laura Smart; Kubzansky, Laura; Maselko, Joanna; Kawachi, et al, "Positive Emotion and Health: Going Beyond the Negative," *Health Psychology*, 24(4), Jul 2005, 422-429; Newlin, K; Melkus, GD; Chyun, D; Jeffereson, V; "The relationship of spirituality and health outcomes in Black women with type 2 diabetes," *Ethnicity and Disease*, 2003 Winter; 13(1):61-8; Zrebiec, John F., "Internet Communities: Do they improve coping with diabetes?," *The Diabetes Educator*, Vol. 31, No. 6, 825-835 (2005), Basa & McLeod, "Evaluation of a diabetes specialty centre: structure, process and outcome," *Patient Educ. Couns*, 1995 Feb; 25(1):23-9; Paquette, Mary, "The Science of Happiness," *Perspectives in Psychiatric Care*, Feb 2006; Hornsten et al, "Personal understandings of illness among people with type 2 diabetes," *Journal of Advanced Nursing*, Vol 47, 2004 July

³⁵ Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06, Rod Lewis interview; articles in program

BY THE EARLY 1980's, NEW PLAYERS ENTERED THE FRAY.³⁶ CITRUS GROWERS, ENERGY PRODUCERS FROM SEVERAL STATES, RESORT DEVELOPERS ALL JOINED THE SCRAMBLE FOR 'LIQUID GOLD'.³⁷ ROD LEWIS SPENT SEVERAL DECADES ON THE PIMA LEGAL TEAM.

ROD LEWIS O/C:

We have sat down with each one of those parties, spent literally thousands of hours right here in this room working on deals to settle our differences between us...

Arizona water settlement act, b/w footage of Pima chanting

ROD LEWIS V/O:

...all of that effort led to the Arizona Water Rights Settlement Act of 2004...

AFTER A HUNDRED YEARS, WATER IS FLOWING DOWN THE GILA RIVER AGAIN. THE WATER RIGHTS ACT PROVIDES THE PIMA THE WATER AND RESOURCES NEEDED TO REBUILD THEIR FARMS.³⁸ BUT IT ALSO PROMISES SOMETHING MORE...

B/W footage from Water Rights ceremony

22:18

GOVERNOR NARCIA V/O:

It is not about economic gain, it is about rebuilding our community.

GOVERNOR NARCIA O/C:

It has never been about personal gain. It is about the return of our culture.

GOVERNOR NARCIA V/O:

I truly believe the warm gentle winds

GOVERNOR NARCIA O/C:

of heaven are once again blowing on the Achimal O'Odham and the Piposh. God bless you all. God bless the Gila River. 22:59

Tractor cultivating wheat

BOBBY STONE V/O:

This is Durham wheat. We contract Durham wheat this year with Arizona Grain.

Bobby stone walking along irrigation canal

BOBBY STONE O/C:

Desert Durham Wheat is what we grow here. Basically, it's for the pasta manufacturers. A lot of it goes to Italy for the making of pasta.

LOWER THIRD:

BOBBY STONE
General Manager
Gila River Farms

BOBBY STONE O/C:

Most of the time we get a better contract for that than other varieties.

³⁶ Ibid

³⁷ Ibid

³⁸ Confirmation from Lucius Kyyitan, Office of Water Rights, GRIC, 11.7.06,

Long shot of Bobby walking into the distance

Henrietta speaking with Tony

HENRIETTA LOPEZ O/C:

So the allotment that you're in is section 12, okay. And this is Gilbert Road right here.

THE TRIBE AND SOME INDIVIDUAL MEMBERS ARE NOW PLANNING TO EXPAND THEIR FARMING. IT'S BEEN NEARLY 20 YEARS SINCE TONY ANTON CULTIVATED HIS OWN ALLOTMENT.³⁹

Reverse of Henrietta speaking with Antoine

HENRIETTA LOPEZ O/C:

So does that kind of make it clear?

TONY ANTON O/C:

A lot, a lot...

HENRIETTA LOPEZ O/C:

A lot better than just trying to explain it over the phone and ...

TONY ANTON V/O:

...that way I won't argue with you next time.

23:59

Dr. Donald Warne interview

DR DONALD WARNE O/C:

In truth, we have more control over the problems like diabetes than we realize.

Close-up of mechanized farm hoe, tire, reverse

DR DONALD WARNE V/O:

We can't think of diabetes and colonization just simply from the role of the victim. The disease patterns like diabetes occur over many years

LOWER THIRD:

DONALD WARNE, MD

President & CEO

American Indian Health Management & Policy

DOCTOR WARNE O/C:

So we're not going to see a dramatic change over night.

But I think in the long run, as we see more success in economic and workforce development,

DOCTOR WARNE V/O:

we're going to see improvements in healthcare systems, education systems and in social policy. We have to take more control over our own communities.

24:32

³⁹ Confirmation per Pre-Interview from Producer Jim Fortier

